

LAKE Co.
United States Steel
ILD 980268296
SF/HRS

EPA Region 5 Records Ctr.



351137

CERCLA Site Inspection Prioritization Analytical Results



**Illinois Environmental
Protection Agency**

2200 Churchill Road
P. O. Box 19276
Springfield, IL 62794-9276

TABLE 2. KEY SAMPLE SUMMARY

UNITED STATES STEEL
 (Waukegan Works)

SITE NAME ILD 980268296	PARAMETER	X101	X102	X03	X04	X105	X106	X107	X108	X109	X110	X111	X112	X113	X114	X115	X201	X202	X203
SEMINOLATILES ug/kg		109	550	560	180	140	120	200	97J	910	1300	320	200J	2400	250J	75J	22J	21U	21U
Phenanthrene		250J	2700	350J	230J	170J	390J	610	150J	2500	1300	780	630	5500E	5700E	870	360U	23J	23J
Pyrene		730																	
INORGANICS mg/kg																			
Arsenic	X101	37.1	26.1	10.9	8.7	11.2	10.1	7.8	8.0	10.8	11.6	12.7	12.8	8.0	9.6	5.7	5.5	6.3	
Barium		143	152	130	89.3	95.1	91.2	55.8	145	95.9	117	144	122	94.1	141	8.9B	6.6B	25.3	
Cadmium		0.28U	0.22	2.1	0.40	0.77	0.71	1.2	0.28	0.96	1.4	1.9	1.5	0.28U	0.25U	0.23U	0.23U	0.23U	
Chromium		18.9	725	14.6	31.6	57.8	45.7	20.5	13.0	15.4	139	19.4	19.7	21.0	19.0	19.1	5.1	4.4	13.3
Cobalt		11.0B	5.9B	17.7	13.4B	11.6	6.9B	12.4	5.2B	7.2B	6.7B	11.3	9.7B	11.3B	10.5B	12.5B	4.0B	4.8B	
Copper		32.0	72.6	97.9	37.0	40.2	34.0	37.5	25.5	58.0	45.0	132	57.0	63.6	28.4	32.7	49.8	18.9	196
Iron		22600	84200	21800	20100	17200	19800	15700	13100	18400Q	21300	22800	22800	21200	23800	14600	8420	48200	
Lead		136	411	132	116	149	149	296	77.9	472	201	614	244	116	145	13.5	114	12600	
Magnesium		3840	27100	1800	4250	11700	3160	10600	7150	27700	6830	9550	10100	9320	3780	32700	48400	31100	
Manganese		862	20800	356	897	803	487	745	526	563	540	726	805	772	774	799	976		
Mercury		0.14U	0.20	0.25	0.18	0.16	0.24	0.22	0.12U	0.13U	0.14	0.13U	0.18	0.14U	0.14U	0.12U	0.12U	0.12U	
Nickel		22.2	25.9	47.5	24.0	25.0	18.5	24.2	16.1	14.7	21.4	23.2	24.3	30.5	20.7	24.2	10.5	6.2B	16.8
Selenium		2.7	7.5	4.5	2.0	1.9	3.3	1.9	2.6	1.9	2.0	2.5	2.4	3.0	1.3	1.1B	2.5		
Thallium		1.5B	1.1U	1.5B	1.3U	1.4	1.3U	1.2U	1.5B	1.2B	1.3U	1.4U	1.3B	1.4U	1.4B	1.2U	1.2U	2.2B	
Vanadium		28.3	229	31.1	28.7	24.3	22.4	25.3	19.2	15.9	23.4	27.4	24.5	29.5	25.6	28.4	11.9B	7.2B	11.9B
Zinc		131	272	452	226	184	175	410	124	411	318	862	392	330	205	151	169	132	1240
Gyandite		0.77	0.54U	0.61U	0.61U	0.61U	0.61U	0.66	0.66	0.57U	0.66	0.66	0.66U	1.1	0.69U	0.71U	0.58U	0.58U	

TARGET COMPOUND LIST**Acid Target Compounds**

Bromoform	Benzoic Acid	2,4,6-Trichlorophenol
PhenoI	2-Chlorophenol	2,4,5-Trichlorophenol
	2-Nitrophenol	4-Chloro-3-methylphenol
	2-Methylphenol	2,4-Dinitrophenol
	2,4-Dimethylphenol	2-Methyl-4,6-dinitrophenol
	4-Nitrophenol	Pentachlorophenol
	4-Nitrophenol	4-Nitrophenol

Pesticide/PCB Target Compounds

Chloromethane	alpha-BHC	Endrin Ketone
Bromomethane	beta-BHC	Endosulfan Sulfate
Vinyl Chloride	delta-BHC	Methoxychlor
Chloroethane	gamma-BHC (Lindane)	alpha-Chlorodane
Methylene Chloride	Heptachlor	gamma-Chlorodane
Acetone	Aldrin	Toxaphene
Carbon Disulfide	Heptachlor epoxide	Aroclor-1016
1,1-Dichloroethene	Endosulfan I	Aroclor-1221
1,1-Dichloroethane	4,4'-DDE	Aroclor-1232
1,2-Dichloroethene (total)	Dieldrin	Aroclor-1242
Chloroform	Endrin	Aroclor-1248
1,2-Dichloroethane	4,4'-DDP	Aroclor-1254
2-Butanone	Endosulfan II	Aroclor-1260
1,1,1-Trichloroethane		
Carbon Tetrachloride		
Vinyl Acetate		
Bromodichloromethane		

Inorganic Target Compounds

Hexachloroethane	2,4-Dinitrotoluene	Manganese
bis(2-Chloroethyl) Ether	Diethylphthalate	Mercury
Benzyl Alcohol	N-Nitrosodiphenylamine	Nickel
bis(2-Chloroisopropyl) Ether	Hexachlorobenzene	Potassium
N-Nitroso-Di-n-Propylamine	Phenanthrene	Selenium
Nitrobenzene	4-Bromophenyl-phenylether	Silver
Hexachlorobutadiene	Anthracene	Sodium
2-Methylnaphthalene	Di-n-Butyl phthalate	Thallium
1,2,4-trichlorobenzene	Fluoranthene	Cadmium
Isophorone	Pyrene	Chromium
Naphthalene	Butylbenzylphthalate	Cobalt
4-Chloroaniline	bis(2-Ethylhexyl) Phthalate	Copper
bis(2-chlorophenoxy)Methane	Chrysene	Iron
Hexachlorocyclopentadiene	Benzo(a)Anthracene	Lead
2-Chloronaphthalene	3,3'-Dichlorobenzidine	Magnesium
2-Nitroaniline	Di-n-Octyl Phthalate	Nickel
Acenaphthylene	Benzo(b)Fluoranthene	Potassium
3-Nitroaniline	Benzo(k)Fluoranthene	Selenium
Acenaphthene	Benzo(a)Pyrene	Silver
Dibenzofuran	Indeno(1,2,3-cd)Pyrene	Sodium
Dimethyl Phthalate	Dibenz(a,h)Anthracene	Thallium
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene	Vanadium
Fluorene	1,2-Dichlorobenzene	Zinc
4-Nitroaniline	1,3-Dichlorobenzene	Cyanide
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene	Sulfide

SPECIAL PESTICIDE LIST

2,4-D

Atrazine

Metolachlor -- Dual

Cyanazine -- Bladex

Fonofos -- Dyfonate

EPTC -- Eptam, Eradicane

Phorate

Metribuzin -- Lexone, Sencor

Trifluralin -- Treflan

Diazinon

Alachlor -- Lasso

U.S.E.P.A. DEFINED DATA QUALIFIERS

<u>QUALIFIER</u>	<u>DEFINITION ORGANICS</u>	<u>DEFINITION INORGANICS</u>
• U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
• J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
• C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
• B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
• D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and <u>all</u> concentration values are flagged with the "D" flag.	not used

<u>QUALIFIER</u>	<u>DEFINITION ORGANICS</u>	<u>DEFINITION INORGANICS</u>
• E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference
• A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
• M	not used	Duplicate injection (a QC parameter) not met.
• N	not used	Spiked sample (a QC parameter) recovery not within control limits.
• S.	not used	The reported value was determined by the Method of Standard Additions (MSA).
• W	not used	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
• *	not used	Duplicate analysis (a QC parameter) not within control limits.
• +	not used	Correlation coefficient for MSA (a QC parameter) is less than 0.995.

<u>QUALIFIER</u>	<u>DEFINITION ORGANICS</u>	<u>DEFINITION INORGANICS</u>
• P	not used	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
• CV	not used	Method qualifier indicates analysis by Cold Vapor AA.
• AV	not used	Method qualifier indicates analysis by Automated Cold Vapor AA
• AS	not used	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
• T	not used	Method qualifier indicates Titrimetric analysis.
• NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
• R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on May 19, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: EPA Patricia J. Scott for
D. Wesolowski

We have reviewed the data for the following case:

06/19/95

SITE NAME: U.S. Steel Waukegan (IL)

CASE NUMBER: 23525 SDG NUMBER: EABE5

Number and Type of Samples: 18 (Soil)

Sample Numbers: EABE5-7, EABF4-9, EABG1, EXQ92-99

Laboratory: RECKA (MD) Hrs. for Review: 27 42
w/for

Following are our findings:

The data are acceptable and usable with the qualifications described in the attached narrative.

Patricia J. Scott

cc: Regional TPO

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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This review covers eighteen (18) soil samples numbered: EABE5, EABE6, EABE7, EABF4, EABF5, EABF6, EABF7, EABF8, EABF9, EABG1, EXQ92, EXQ93, EXQ94, EXQ95, EXQ96, EXQ97, EXQ98 and EXQ99. Recra Environmental, Inc., Maryland received the samples on 05-05-95 in good condition. All samples were analyzed for the full list of organic analytes following Statement of Work (SOW) document No OLMO3.1 protocol.

The Volatile soil samples were analyzed within the holding time criteria of fourteen (14) days. The Semivolatile and Pesticide samples were extracted within the holding time of fourteen (14) days and extracts were analyzed within forty (40) days following the extraction.

The reviewer's narrative and data qualifiers from CADRE 2.1 are noted in the following pages.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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Below is a summary of the out-of-control audits and the possible effect on the data for this case.

1. HOLDING TIME

DC-5: The following volatile soil samples have aromatic analytes outside primary holding time criteria.
Hits are qualified "J" and non-detects are qualified "UJ".

EABE5

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EABE6

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EABE7

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EABF7

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EABF9

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EABG1

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EXQ97MS

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EXQ97MSD

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

EXQ98

Benzene, Toluene, Chlorobenzene, Ethylbenzene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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Styrene, Xylene (total)

EXQ99

Benzene, Toluene, Chlorobenzene, Ethylbenzene
Styrene, Xylene (total)

According to Region V guidelines the holding time for aromatic analytes is the same as for non-aromatic, therefore the reviewer changed the flag for aromatic analytes from "UJ" to "J" for non-detected. For the results above the CRQL removed the "J" flag.

2. GC/MS TUNING PERFORMANCE

DC-12: The following volatile samples are not associated with any instrument performance check. Hits and non-detects are flagged "M".

EABF9, EXQ97MS, EXQ97MSD, VBLK54

The "M" flag for above noted samples was replaced by reviewer with the final flag. Please, refer to section 13 for the final flag of the results.

CALIBRATION

DC-14: The following volatile samples were not associated with any calibration because no associated instrument performance check could be found.
Hits and non-detects are flagged "M".

EABF9, EXQ97MS, EXQ97MSD, VBLK54

The "M" flag for above noted samples was replaced by reviewer with the final flag. Please, refer to section 13 for the final flag of the results.

DC-21: The following volatile samples are associated with an initial calibration percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are flagged "VS".

Methylene Chloride
EXQ95, EXQ96, VBLK52

Acetone
EXQ95, EXQ96, VBLK52

Reviewed by: Krystyna Minczuk, Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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The "VS" flag for above noted samples was replaced by reviewer with the final flag. Please, refer to section 13 for the final flag of the results.

DC-22: The following volatile samples are associated with a continuing calibration whose corresponding initial calibration has percent relative standard deviation (%RSD) outside primary criteria.
Hits are qualified "J" and non-detects are flagged "VS".

Methylene Chloride

EABE5, EABE6, EABE7, EABF4, EABF5, EABF6
EABF7, EABF8, EABG1, EXQ92, EXQ93, EXQ94
EXQ97, EXQ98, EXQ99, VBLK53, VBLK83

Acetone

EABE5, EABE6, EABE7, EABF4, EABF5, EABF6
EABF7, EABF8, EABG1, EXQ92, EXQ93, EXQ94
EXQ97, EXQ98, EXQ99, VBLK53, VBLK83

The "VS" flag for above noted samples was replaced by reviewer with the final flag. Please, refer to section 13 for the final flag of the results.

DC-23: The following volatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria.

Hits are qualified "J" and non-detects are qualified

"UJ".

Chloromethane

EABE5, EABE6, EABE7, EABF4, EABF5, EABF6
EABF7, EABF8, EABG1, EXQ92, EXQ93, EXQ94
EXQ97, EXQ98, EXQ99, VBLK53, VBLK83

Vinyl Chloride

EABE5, EABE6, EABE7, EABF7, EABG1, EXQ92
EXQ93, EXQ94, EXQ97, EXQ98, EXQ99, VBLK83

Methylene Chloride

EABE5, EABE6, EABE7, EABF7, EABG1, EXQ92
EXQ93, EXQ94, EXQ97, EXQ98, EXQ99, VBLK83

1,2-Dichloropropane

EABF4, EABF5, EABF6, EABF8, VBLK53

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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4-Methyl-2-Pentanone
EABF4, EABF5, EABF6, EABF8, VBLK53

2-Hexanone
EABF4, EABF5, EABF6, EABF8, VBLK53

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

Hexachlorocyclopentadiene
EABE7DL, EABF5, EABF5RE, EXQ95DL, EXQ95RE, EXQ96DL
EXQ96RE

4-Nitrophenol
EABE7DL, EABE7RE, EABF4RE, EABF5, EABF5RE, EABF9RE
EXQ93RE, EXQ94RE, EXQ95, EXQ95DL, EXQ95RE, EXQ96
EXQ96DL, EXQ96RE, EXQ97MS, EXQ97MSD

3,3'-Dichlorobenzidine
EABE5RE, EABE7, EABE7DL, EABF4, EABF5, EABF5RE
EABF6RE, EABF7RE, EABF8RE, EABF9, EXQ92RE, EXQ93
EXQ94, EXQ95DL, EXQ95RE, EXQ96DL, EXQ96RE, EXQ97

Indeno(1,2,3-cd)pyrene
EABE7RE, EABF4RE, EABF9RE, EXQ93RE, EXQ94RE, EXQ95
EXQ96, EXQ97MS, EXQ97MSD

Benzo(g,h,i)perylene
EABE7RE, EABF4RE, EABF9RE, EXQ93RE, EXQ94RE, EXQ95
EXQ96, EXQ97MS, EXQ97MSD

DC-100: The following semivolatile samples are associated with a continuing calibration percent difference (%D) outside primary criteria. Hits are qualified "J" and non-detects are qualified "UJ".

2,2'-oxybis(1-Chloropropane
EAAY4, SBLK63

1,2,4-Trichlorobenzene
EAAY4, SBLK63

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
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Hexachlorobutadiene
EAAY4, SBLK63

2,4-Dinitrophenol
EAAY4, SBLK63

4-Chlorophenyl-phenyl ether
EAAY3, EAAY4, EAAY5, EAAY6, EAAY7, EAAY8
EAAY9, EAAY9MS, EAAY9MSD, SBLK59, SBLK63

Butylbenzylphthalate
EAAY4, SBLK63

Di-n-octylphthalate
EAAY4, SBLK63

Benzo(k)fluoranthene
EAAY4, SBLK63

METHOD BLANK

DC-26: No method blanks were found for the following volatile samples due to lack of an instrument performance check. Hits are flagged "M" and non-detects are not flagged.

EABF9, EXQ97MS, EXQ97MSD

The "M" flag of the positive results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

DC-31: The following volatile samples have analyte concentrations reported above the CRQL and less than or equal to ten times (10X) the associated method blank concentration.

Hits are qualified "U" and non-detects are not flagged.

EABE5

Methylene Chloride

EABE6

Methylene Chloride

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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EABE7
Methylene Chloride

EABF5
Methylene Chloride

EABF6
Methylene Chloride

EABF7
Methylene Chloride

EABG1
Methylene Chloride

EXQ92
Methylene Chloride

EXQ94
Methylene Chloride

EXQ97
Methylene Chloride

EXQ98
Methylene Chloride

EXQ99
Methylene Chloride

DC-200: The following volatile samples have analyte concentrations reported below the CRQL and less than or equal to ten times (10X) the associated method blank concentration. Reported sample concentrations have been elevated to the CRQL.
Hits are qualified "U" and non-detects are not flagged.

EABE5
Acetone

EABF4
Methylene Chloride, Acetone

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
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EABF5
Acetone

EABF7
Acetone

EABF8
Methylene Chloride, Acetone

EABG1
Acetone

EXQ93
Methylene Chloride

EXQ95
Methylene Chloride

EXQ96
Methylene Chloride, Acetone

EXQ97
Acetone

EXQ98
Acetone

5. SYSTEM MONITORING COMPOUND AND SURROGATE RECOVERY

DC-87: The following semivolatile samples have base/neutral surrogate recoveries of less than 10%. Hits are qualified "J" and non-detects are qualified "R".

EABE7DL, EXQ95DL, EXQ96DL

DC-88: The following semivolatile samples have acid surrogate recoveries of less than 10%. Hits are qualified "J" and non-detects are qualified "R".

EABE7DL, EXQ95DL, EXQ96DL

DC-174: The following pesticide samples have surrogate percent recoveries which exceed the upper limit of the criteria window.

Reviewed by: Krystyna Minczuk, Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
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SITE NAME: U.S. Steel Waukegan (IL)

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Hits are qualified "J" and non-detects are not flagged.

EABE5, EABF5, EABF6, EABF7, EABF9DL, EXQ92
EXQ95, EXQ96

DC-177: The following pesticide samples have surrogate percent recoveries outside the lower limit of the criteria window, but greater than 10%. Hits are qualified "J" and non-detects are qualified "UJ".

EABF5

DC-178: The following pesticide samples are not fully qualified for surrogate RT because of missing RT information.
Hits and non-detects are flagged "M".

EABE5DL, EABF7DL, EABF9DL

The "M" flag of the results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

DC-180: The following pesticide samples are not qualified for surrogate percent recovery because of missing percent recovery information.
Hits and non-detects are flagged "M".

EABF7DL

The "M" flag of the results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

DC-38: The relative percent difference (RPD) between the following volatile matrix spike and matrix spike duplicate recoveries is outside criteria.
Hits and non-detects are not flagged.

EXQ97MS
Toluene, Chlorobenzene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
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EXQ97MSD
Toluene, Chlorobenzene

DC-39: The following volatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Hits and non-detects are not flagged.

EXQ97MS
1,1-Dichloroethene, Trichloroethene, Benzene,
Toluene, Chlorobenzene

EXQ97MSD
1,1-Dichloroethene, Trichloroethene, Benzene,
Toluene, Chlorobenzene

DC-51: The following semivolatile matrix spike/matrix spike duplicate samples have percent recovery outside criteria. Hits and non-detects are not flagged.

EXQ97MS
Phenol, 2-Chlorophenol, 1,4-Dichlorobenzene,
N-Nitroso-di-n-propylamine, 1,2,4-Trichlorobenzene,
4-Chloro-3-methylphenol, 4-Nitrophenol,
2,4-Dinitrotoluene, Pentachlorophenol, Pyrene

EXQ97MSD
Phenol, 2-Chlorophenol, 1,4-Dichlorobenzene,
1,2,4-Trichlorobenzene, 4-Chloro-3-methylphenol,
4-Nitrophenol, 2,4-Dinitrotoluene, Pentachlorophenol
Pyrene

DC-169: The relative percent difference (RPD) between the following pesticide matrix spike and matrix spike duplicate recoveries is outside criteria. Hits and non-detects are not flagged.

EXQ97MS
4,4'-DDT

EXQ97MSD
4,4'-DDT

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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DC-170: The following pesticide matrix spike/matrix spike duplicate samples have percent recovery outside criteria.
Hits and non-detects are not flagged.

EXQ97MS
4,4'-DDT

EXQ97MSD
4,4'-DDT

7. FIELD BLANK AND FIELD DUPLICATE
N/A

8. INTERNAL STANDARD

DC-40: The following volatile samples have no associated internal standard. Hits and non-detects are flagged "M".

EABF9, EXQ97MS, EXQ97MSD, VBLK54

The "M" flag of the positive results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

DC-77: The following semivolatile samples have internal standard area counts that are outside the lower limit of primary criteria.

Hits are qualified "J" and non-detects are qualified "UJ".

EABE5

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABE5RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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SITE NAME: U.S. Steel Waukegan (IL)

EABE7RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EABF4

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EABF4RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EABF5

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EABF6

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF6RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF7

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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Benzo(g,h,i)perylene

EABF7RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF8

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF8RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF9

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EABF9RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ92

Phenol, bis(2-Chloroethyl) ether, 2-Chlorophenol,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
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SITE NAME: U.S. Steel Waukegan (IL)

1,3-Dichlorobenzene, 1,4-Dichlorobenzene,
1,2-Dichlorobenzene, 2-Methylphenol,
2,2'-oxybis(1-Chloropropane, 4-Methylphenol,
N-Nitroso-di-n-propylamine, Hexachloroethane,
Nitrobenzene, Isophorone, 2-Nitrophenol,
2,4-Dimethylphenol, bis(2-Chloroethoxy) methane,
2,4-Dichlorophenol, 1,2,4-Trichlorobenzene,
Naphthalene, 4-Chloroaniline, Hexachlorobutadiene,
4-Chloro-3-methylphenol, 2-Methylnaphthalene,
4,6-Dinitro-2-methylphenol,N-nitrosodiphenylamine,
4-Bromophenyl-phenylether, Hexachlorobenzene,
Pentachlorophenol, Phenanthrene, Anthracene,
Carbazole, Di-n-butylphthalate, Fluoranthene,
Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ92RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EXQ93

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EXQ93RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene.
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ94

Pyrene, Butylbenzylphthalate,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
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SDG #: EABES

SITE NAME: U.S. Steel Waukegan (IL)

3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,

EXQ94RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EXQ95

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ95RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ96

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,

EXQ96DL

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ96RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ97

4,6-Dinitro-2-methylphenol, N-nitrosodiphenylamine,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
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SITE NAME: U.S. Steel Waukegan (IL)

4-Bromophenyl-phenylether, Hexachlorobenzene,
Pentachlorophenol, Phenanthrene, Anthracene,
Carbazole, Di-n-butylphthalate, Fluoranthene

EXQ97MS

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

EXQ97MSD

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate

DC-78: The following semivolatile samples have internal standard area counts outside expanded criteria. Hits are qualified "J" and non-detects are qualified "R".

EABE7

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene.
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABE7RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF4

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF4RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF5

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF5RE

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EABF9

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ92RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ93

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ94

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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EXQ94RE

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ96

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ97

Pyrene, Butylbenzylphthalate,
3,3'-Dichlorobenzidine, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ97MS

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

EXQ97MSD

Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene,
Benzo(g,h,i)perylene

9.COMPOUND IDENTIFICATION

N/A

10.COMPOUND QUANTITATION AND REPORTED DETECTION LIMIT

DC-45: The following volatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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EABE5

Acetone

EABF4

Methylene Chloride, Acetone

EABF5

Acetone

EABF7

Acetone

EABF8

Methylene Chloride, Acetone

EABG1

Acetone

EXQ93

Methylene Chloride

EXQ95

Methylene Chloride

EXQ96

Methylene Chloride, Acetone

EXQ97

Acetone

EXQ97MSD

Chlorobenzene

EXQ98

Acetone

VBLK52

Methylene Chloride, Acetone, 2-Butanone

VBLK53

Methylene Chloride

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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VBLK55
Methylene Chloride

VBLK83
Methylene Chloride, Acetone

DC-66: The quantitation limits of the following volatile samples could not be calculated, due to missing information. Hits are flagged "M" and non-detects are not flagged.

VBLK52, VBLK53, VBLK54, VBLK83

The "M" flag of the positive results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

DC-110: The following semivolatile samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EABE5
Diethylphthalate, Phenanthrene, Di-n-butylphthalate,
Fluoranthene, Pyrene, Butylbenzylphthalate,
Benzo(a)anthracene, Chrysene,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene

EABE5RE
Diethylphthalate, Phenanthrene, Di-n-butylphthalate,
Fluoranthene, Pyrene, Butylbenzylphthalate,
Benzo(a)anthracene, Chrysene,
Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene

EABE6
Diethylphthalate, Phenanthrene, Di-n-butylphthalate,
Fluoranthene, Pyrene, Butylbenzylphthalate,
Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
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SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

EABE7

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Diethylphthalate, Fluorene,
Anthracene, Carbazole, Di-n-octylphthalate

EABE7DL

Fluorene, Phenanthrene, Anthracene, Carbazole
Fluoranthene, Pyrene, Butylbenzylphthalate,
Benzo(a)anthracene, Chrysene, Di-n-octylphthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

EABE7RE

Naphthalene, Acenaphthene, Dibenzofuran,
Diethylphthalate, Fluorene, Anthracene, Carbazole,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EABF4

2-Methylnaphthalene, Diethylphthalate, Phenanthrene,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EABF4RE

2-Methylnaphthalene, Diethylphthalate, Phenanthrene,
Carbazole, Di-n-butylphthalate, Fluoranthene,
Butylbenzylphthalate, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

EABF5

2-Methylnaphthalene, Acenaphthene, Dibenzofuran,
Fluorene, Anthracene, Carbazole,
Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate

EABF5RE

2-Methylnaphthalene, Acenaphthene, Dibenzofuran,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
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SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

Fluorene, Anthracene, Carbazole,
Di-n-butylphthalate, bis(2-Ethylhexyl)phthalate

EABF6

Naphthalene, 2-Methylnaphthalene, Dibenzofuran,
Diethylphthalate, N-nitrosodiphenylamine,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene

EABF6RE

Naphthalene, 2-Methylnaphthalene, Dibenzofuran,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene

EABF7

Diethylphthalate, Phenanthrene, Di-n-butylphthalate,
Fluoranthene, Pyrene, Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EABF7RE

Diethylphthalate, Phenanthrene, Anthracene,
Di-n-butylphthalate, Fluoranthene, Pyrene,
Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EABF8

Diethylphthalate, Phenanthrene, Anthracene,
Di-n-butylphthalate, Fluoranthene, Pyrene,
Butylbenzylphthalate, Benzo(a)anthracene,
Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

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CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

EABF8RE

Diethylphthalate, Phenanthrene, Anthracene,
Di-n-butylphthalate, Fluoranthene, Pyrene,
Butylbenzylphthalate, Benzo(a)anthracene,
Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene

EABF9

Diethylphthalate, Hexachlorobenzene, Phenanthrene,
Di-n-butylphthalate, Fluoranthene, Pyrene,
Butylbenzylphthalate, Benzo(a)anthracene,
Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EABF9RE

Diethylphthalate, Hexachlorobenzene, Phenanthrene,
Di-n-butylphthalate, Fluoranthene, Pyrene,
Benzo(a)anthracene, Chrysene,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

EABG1

Phenanthrene, Fluoranthene, Pyrene,
Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate

EXQ92

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Fluorene, Hexachlorobenzene,
Anthracene, Carbazole, Di-n-butylphthalate,
Butylbenzylphthalate, bis(2-Ethylhexyl)phthalate,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EXQ92RE

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Fluorene, Hexachlorobenzene,
Anthracene, Carbazole, Di-n-butylphthalate,
bis(2-Ethylhexyl)phthalate, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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EXQ93

Diethylphthalate, Phenanthrene, Anthracene,
Carbazole, Di-n-butylphthalate, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

EXQ93RE

Acenaphthene, Diethylphthalate, Phenanthrene,
Anthracene, Carbazole, Di-n-butylphthalate,
Benzo(a)anthracene, Chrysene,
bis(2-Ethylhexyl)phthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EXQ94

Naphthalene, 2-Methylnaphthalene, Phenanthrene,
Carbazole, Di-n-butylphthalate, Fluoranthene,
Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EXQ94RE

Naphthalene, 2-Methylnaphthalene, Phenanthrene,
Carbazole, Di-n-butylphthalate, Fluoranthene,
Butylbenzylphthalate, Benzo(a)anthracene,
Chrysene, Di-n-octylphthalate, Benzo(b)fluoranthene,
Benzo(k)fluoranthene, Benzo(a)pyrene,
Indeno(1,2,3-cd)pyrene, Benzo(g,h,i)perylene

EXQ95

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Fluorene, Anthracene, Carbazole,
Di-n-butylphthalate, Butylbenzylphthalate,
Di-n-octylphthalate,

EXQ95DL

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Fluorene, Anthracene, Carbazole,
bis(2-Ethylhexyl)phthalate, Indeno(1,2,3-cd)pyrene,
Dibenz(a,h)anthracene, Benzo(g,h,i)perylene

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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EXQ95RE

Naphthalene, 2-Methylnaphthalene, Acenaphthene,
Dibenzofuran, Fluorene, Anthracene, Carbazole,
Di-n-butylphthalate, Butylbenzylphthalate,
Dibenz(a,h)anthracene

EXQ96

Acenaphthene, Dibenzofuran, Fluorene, Anthracene
Carbazole, Di-n-butylphthalate, Di-n-octylphthalate

EXQ96DL

Acenaphthene, Dibenzofuran, Fluorene, Anthracene
Carbazole, Butylbenzylphthalate,
Indeno(1,2,3-cd)pyrene, Dibenz(a,h)anthracene
Benzo(g,h,i)perylene

EXQ96RE

Acenaphthene, Dibenzofuran, Fluorene, Anthracene,
Carbazole, Di-n-butylphthalate,
Butylbenzylphthalate, Di-n-octylphthalate

EXQ97

Naphthalene, 2-Methylnaphthalene, Phenanthrene,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene,
Benzo(g,h,i)perylene

EXQ97MS

Naphthalene, 2-Methylnaphthalene, Phenanthrene,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Benzo(a)anthracene,
Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene,
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene

EXQ97MSD

Naphthalene, 2-Methylnaphthalene, Phenanthrene,
Anthracene, Carbazole, Di-n-butylphthalate,
Fluoranthene, Benzo(a)anthracene,

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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Chrysene, bis(2-Ethylhexyl)phthalate,
Benzo(b)fluoranthene, Benzo(k)fluoranthene
Benzo(a)pyrene, Indeno(1,2,3-cd)pyrene

EXQ98

Phenanthrene, Fluoranthene, Pyrene,
Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene,
Benzo(k)fluoranthene

EXQ99

Phenanthrene, Fluoranthene,
bis(2-Ethylhexyl)phthalate,

DC-111: The quantitation limits of the following semivolatile samples could not be calculated due to missing information. Hits are flagged "M" and non-detects are not flagged.

SBLK1

The "M" flag of the positive results for SBLK1 was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

DC-158: The following pesticide samples have analyte concentrations below the quantitation limit (CRQL). All results below the CRQL are qualified "J".

EABE5

4,4'-DDE, 4,4'-DDD, Endosulfan sulfate

EABE5DL

Heptachlor, 4,4'-DDT

EABE6

Aldrin, 4,4'-DDE, Endosulfan sulfate, 4,4'-DDT
Endrin ketone, alpha-Chlordane, gamma-Chlordane,
Aroclor-1254, Aroclor-1260

EABE7

Heptachlor epoxide, Endosulfan I, 4,4'-DDE,
Endosulfan sulfate, alpha-Chlordane,
gamma-Chlordane, Aroclor-1260

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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EABF4

Heptachlor epoxide, 4,4'-DDD, Endosulfan sulfate,
alpha-Chlordan, gamma-Chlordan, Aroclor-1254

EABF5

4,4'-DDE, Endosulfan sulfate, Endrin ketone,
gamma-Chlordan, Aroclor-1254

EABF6

delta-BHC, Heptachlor, Heptachlor epoxide, 4,4'-DDE
Endrin ketone, Endrin aldehyde, gamma-Chlordan,
Aroclor-1260

EABF7

4,4'-DDD

EABF7DL

Heptachlor

EABF8

Heptachlor, Dieldrin, 4,4'-DDD, Endosulfan sulfate,
Aroclor-1260

EABF8DL

Dieldrin, 4,4'-DDE, Endosulfan sulfate, 4,4'-DDT

EABF9

Heptachlor, 4,4'-DDE, 4,4'-DDD

EABF9DL

4,4'-DDE, 4,4'-DDT

EABG1

delta-BHC, Heptachlor epoxide, Endrin ketone

EXQ92

Dieldrin, Endrin ketone, gamma-Chlordan

EXQ93

Heptachlor, 4,4'-DDD, Endrin ketone

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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EXQ94

Aldrin, 4,4'-DDD, Endosulfan sulfate,
alpha-Chlordane, gamma-Chlordane

EXQ95

4,4'-DDD, Endosulfan sulfate, Endrin ketone

EXQ96

4,4'-DDD, Endosulfan sulfate, Endrin ketone

EXQ97

4,4'-DDD

EXQ97MS

4,4'-DDD, Endrin ketone, alpha-Chlordane,
gamma-Chlordane

EXQ97MSD

4,4'-DDD, Endrin ketone, alpha-Chlordane,
gamma-Chlordane

EXQ99

Heptachlor epoxide

DC-159: The quantitation limits of the following pesticide samples could not be calculated due to missing information.
Hits are qualified "M" and non-detects are not flagged.

PBLK1

The "M" flag of the positive results for the above noted samples was replaced with the final flag by the reviewer. Please, refer to section 13 for the final flag of the results.

11.SYSTEM PERFORMANCE

No problems found for this qualification.

12.ADDITIONAL INFORMATION

N/A

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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13.CADRE SUMMARY

FILENAME: EABE5 DATE: 06/08/95 TIME: 13:42				
CRITERIA FILE: FGDR091				
DATA				
<table><tr><td><input type="checkbox"/> Original</td><td><input checked="" type="checkbox"/> Qualified</td></tr></table>			<input type="checkbox"/> Original	<input checked="" type="checkbox"/> Qualified
<input type="checkbox"/> Original	<input checked="" type="checkbox"/> Qualified			
QUALIFICATIONS PERFORMED				
X	Quantitation Limit Percent Moisture	Sample Cleanup ICS		
X	Holding Time	LCS		
X	Calibration	Duplicates		
X	Matrix Spike	Furnace AA QC		
X	IPC	Serial Dilutions		
X	Internal Standards	Sample Result Verif.		
A	SMC/Surrogate	Laboratory Blanks		
X	System Performance	X Field QC		
PRINT NON-DETECTS				
X	Yes	<input type="checkbox"/> No		
PRINT REJECTED RESULTS				
X	Yes	<input type="checkbox"/> No		

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER:	EABE5	EABE6	EABE7	EABF4	EABF5	
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
SAMPLE TYPE:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	
MATRIX/ANALYSIS:	1.0	1.0	1.0	1.0	1.0	
DILUTION FACTOR:	20	23	13	28	9	
PERCENT MOISTURE:						
VOA						
Chloromethane	12	U	13	U	11	U
Bromomethane	12	U	13	U	11	U
Vinyl Chloride	12	U	13	U	11	U
Chloroethane	12	U	13	U	11	U
Methylene Chloride	22	U	24	U	18	U
Acetone	12	U	13	U	11	U
Carbon Disulfide	12	U	13	U	11	U
1,1-Dichloroethene	12	U	13	U	11	U
1,1-Dichloroethane	12	U	13	U	11	U
1,2-Dichloroethene (total)	12	U	13	U	11	U
Chloroform	12	U	13	U	11	U
1,2-Dichloroethane	12	U	13	U	11	U
2-Butanone	12	U	13	U	11	U
1,1,1-Trichloroethane	12	U	13	U	11	U
Carbon Tetrachloride	12	U	13	U	11	U
Bromodichloromethane	12	U	13	U	11	U
1,2-Dichloropropane	12	U	13	U	11	U
cis-1,3-Dichloropropene	12	U	13	U	11	U
Trichloroethene	12	U	13	U	11	U
Dibromochloromethane	12	U	13	U	11	U
1,1,2-Trichloroethane	12	U	13	U	11	U
Benzene	12	U	13	U	11	U
trans-1,3-Dichloropropene	12	U	13	U	11	U
Bromoform	12	U	13	U	11	U
4-Methyl-2-Pentanone	12	U	13	U	11	U
2-Hexanone	12	U	13	U	11	U
Tetrachloroethene	12	U	13	U	11	U
1,1,2,2-Tetrachloroethane	12	U	13	U	11	U
Toluene	12	U	13	U	11	U
Chlorobenzene	12	U	13	U	11	U
Ethylbenzene	12	U	13	U	11	U
Styrene	12	U	13	U	11	U
Xylene (total)	12	U	13	U	11	U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						SITE: LABORATORY: RECRA ENVIRON	
CASE NO: 23525 SDG NO: EABE5	EABF6	EABF7	EABF8	EABF9	EABG1		
EPA SAMPLE NUMBER:							
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:							
SAMPLE TYPE:	Routine Sample						
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW		
DILUTION FACTOR:	1.0	1.0	.1.0	1.0	1.0		
PERCENT MOISTURE:	18	22	17	25	13		
VOA							
Chloromethane	12	U	13	U	12	U	11
Bromomethane	12	U	13	U	12	U	11
Vinyl Chloride	12	U	13	U	12	U	11
Chloroethane	12	U	13	U	12	U	11
Methylene Chloride	22	U	15	U	12	U	22
Acetone	12	U	13	U	12	U	11
Carbon Disulfide	12	U	13	U	12	U	11
1,1-Dichloroethene	12	U	13	U	12	U	11
1,1-Dichloroethane	12	U	13	U	12	U	11
1,2-Dichloroethene (total)	12	U	13	U	12	U	11
Chloroform	12	U	13	U	12	U	11
1,2-Dichloroethane	12	U	13	U	12	U	11
2-Butanone	12	U	13	U	12	U	11
1,1,1-Trichloroethane	12	U	13	U	12	U	11
Carbon Tetrachloride	12	U	13	U	12	U	11
Bromodichloromethane	12	U	13	U	12	U	11
1,2-Dichloropropane	12	U	13	U	12	U	11
trans-1,3-Dichloropropene	12	U	13	U	12	U	11
Trichloroethene	12	U	13	U	12	U	11
Dibromochloromethane	12	U	13	U	12	U	11
1,1,2-Trichloroethane	12	U	13	U	12	U	11
Benzene	12	U	13	U	12	U	11
trans-1,3-Dichloropropene	12	U	13	U	12	U	11
Bromoform	12	U	13	U	12	U	11
4-Methyl-2-Pentanone	12	U	13	U	12	U	11
2-Hexanone	12	U	13	U	12	U	11
Tetrachloroethene	12	U	13	U	12	U	11
1,1,2,2-Tetrachloroethane	12	U	13	U	12	U	11
Toluene	12	U	13	U	12	U	11
Chlorobenzene	12	U	13	U	12	U	11
Ethylbenzene	12	U	13	U	12	U	11
Styrene	12	U	13	U	12	U	11
Xylene (total)	12	U	13	U	12	U	11

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
 Date: June 15th, 1995

LABORATORY: RECRA-MD

CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EXQ92 Routine Sample SOIL/LOW 1.0 24	EXQ93 Routine Sample SOIL/LOW 1.0 25	EXQ94 Routine Sample SOIL/LOW 1.0 23	EXQ95 Routine Sample SOIL/LOW 1.0 23	EXQ96 Routine Sample SOIL/LOW 1.0 23	
VOA						
Chloromethane	13 U	13 U				
Bromomethane	13 U	13 U				
Vinyl Chloride	13 U	13 U				
Chloroethane	13 U	13 U				
Methylene Chloride	16 U	13 U	23 U	13 U	13 U	13 U
Acetone	13 U	13 U				
Carbon Disulfide	13 U	13 U				
1,1-Dichloroethene	13 U	13 U				
1,1-Dichloroethane	13 U	13 U				
1,2-Dichloroethene (total)	13 U	13 U				
Chloroform	13 U	13 U				
1,2-Dichloroethane	13 U	13 U				
2-Butanone	13 U	13 U				
1,1,1-Trichloroethane	13 U	13 U				
Carbon Tetrachloride	13 U	13 U				
Bromodichloromethane	13 U	13 U				
1,2-Dichloropropane	13 U	13 U				
trans-1,3-Dichloropropene	13 U	13 U				
Trichloroethene	13 U	13 U				
Dibromochloromethane	13 U	13 U				
1,1,2-Trichloroethane	13 U	13 U				
Benzene	13 U	13 U				
trans-1,3-Dichloropropene	13 U	13 U				
Bromoform	13 U	13 U				
4-Methyl-2-Pentanone	13 U	13 U				
2-Hexanone	13 U	13 U				
Tetrachloroethene	13 U	13 U				
1,1,2,2-Tetrachloroethane	13 U	13 U				
Toluene	13 U	13 U				
Chlorobenzene	13 U	13 U				
Ethylbenzene	13 U	13 U				
Styrene	13 U	13 U				
Xylene (total)	13 U	13 U				

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
 Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
 Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						SITE: LABORATORY: RECRA ENVIRON	
CASE NO: 23525 SDG NO: EABE5	EXQ97	EXQ97MS	EXQ97MSD	EXQ98	EXQ99		
EPA SAMPLE NUMBER:							
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:							
SAMPLE TYPE:	Routine Sample	Matrix Spike	Matrix Spike Du	Routine Sample	Routine Sample		
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW		
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0		
PERCENT MOISTURE:	29	29	29	12	13		
VOA							
Chloromethane	14	U	14	U	14	U	11
Bromomethane	14	U	14	U	14	U	11
Vinyl Chloride	14	U	14	U	14	U	11
Chloroethane	14	U	14	U	14	U	11
Methylene Chloride	16	U	16	U	19	U	22
Acetone	14	U	14	U	14	U	11
Carbon Disulfide	14	U	14	U	14	U	11
1,1-Dichloroethene	14	U	29		30	U	11
1,1-Dichloroethane	14	U	14	U	14	U	11
1,2-Dichloroethene (total)	14	U	14	U	14	U	11
Chloroform	14	U	14	U	14	U	11
1,2-Dichloroethane	14	U	14	U	14	U	11
2-Butanone	14	U	14	U	14	U	11
1,1,1-Trichloroethane	14	U	14	U	14	U	11
Carbon Tetrachloride	14	U	14	U	14	U	11
Bromodichloromethane	14	U	14	U	14	U	11
1,2-Dichloropropane	14	U	14	U	14	U	11
is-1,3-Dichloropropene	14	U	14	U	14	U	11
Trichloroethene	14	U	22		19	U	11
Dibromochloromethane	14	U	14	U	14	U	11
1,1,2-Trichloroethane	14	U	14	U	14	U	11
Benzene	14	U	26		21	U	11
trans-1,3-Dichloropropene	14	U	14	U	14	U	11
Bromoform	14	U	14	U	14	U	11
4-Methyl-2-Pentanone	14	U	14	U	14	U	11
2-Hexanone	14	U	14	U	14	U	11
Tetrachloroethene	14	U	14	U	14	U	11
1,1,2,2-Tetrachloroethane	14	U	14	U	14	U	11
Toluene	14	U	25		18	U	11
Chlorobenzene	14	U	19		12	U	11
Ethylbenzene	14	U	14	U	14	U	11
Styrene	14	U	14	U	14	U	11
Xylene (total)	14	U	14	U	14	U	11

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	VBLK52 Method Blank SOIL/LOW 1.0	VBLK53 Method Blank SOIL/LOW 1.0	VBLK54 Method Blank SOIL/LOW 1.0	VBLK55 Method Blank WATER/LOW 1.0	VBLK83 Method Blank SOIL/LOW 1.0	
VOA						
Chloromethane	10 U	10 U	10 U	10 U	10	10 U
Bromomethane	10 U	10 U	10 U	10 U	10	10 U
Vinyl Chloride	10 U	10 U	10 U	10 U	10	10 U
Chloroethane	10 U	10 U	10 U	10 U	10	10 U
Methylene Chloride	8 J	8 J	13	2	9	J
Acetone	9 J	11	10 U	10	7	J
Carbon Disulfide	10 U	10 U	10 U	10	10	U
1,1-Dichloroethene	10 U	10 U	10 U	10	10	U
1,1-Dichloroethane	10 U	10 U	10 U	10	10	U
1,2-Dichloroethene (total)	10 U	10 U	10 U	10	10	U
Chloroform	10 U	10 U	10 U	10	10	U
1,2-Dichloroethane	10 U	10 U	10 U	10	10	U
2-Butanone	2 J	10 U	10 U	10	10	U
1,1,1-Trichloroethane	10 U	10 U	10 U	10	10	U
Carbon Tetrachloride	10 U	10 U	10 U	10	10	U
Bromodichloromethane	10 U	10 U	10 U	10	10	U
1,2-Dichloroproppane	10 U	10 U	10 U	10	10	U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10	10	U
Trichloroethene	10 U	10 U	10 U	10	10	U
Dibromochloromethane	10 U	10 U	10 U	10	10	U
1,1,2-Trichloroethane	10 U	10 U	10 U	10	10	U
Benzene	10 U	10 U	10 U	10	10	U
trans-1,3-Dichloropropene	10 U	10 U	10 U	10	10	U
Bromoform	10 U	10 U	10 U	10	10	U
4-Methyl-2-Pentanone	10 U	10 U	10 U	10	10	U
2-Hexanone	10 U	10 U	10 U	10	10	U
Tetrachloroethene	10 U	10 U	10 U	10	10	U
1,1,2,2-Tetrachloroethane	10 U	10 U	10 U	10	10	U
Toluene	10 U	10 U	10 U	10	10	U
Chlorobenzene	10 U	10 U	10 U	10	10	U
Ethylbenzene	10 U	10 U	10 U	10	10	U
Styrene	10 U	10 U	10 U	10	10	U
Xylene (total)	10 U	10 U	10 U	10	10	U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
 Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
 Date: June 15th, 1995

LABORATORY: RECRA-MD

CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABE5 Routine Sample SOIL/LOW 1.0 20	EABE5RE Routine Sample SOIL/LOW 1.0 20	EABE6 Routine Sample SOIL/LOW 1.0 23	EABE7 Routine Sample SOIL/LOW 1.0 13	EABE7DL Routine Sample SOIL/LOW 4.0 13	
BNA						
Phenol	410 U	410 U	430 U	380 U	1500 U	R
bis(2-Chloroethyl) ether	410 U	410 U	430 U	380 U	1500 U	R
2-Chlorophenol	410 U	410 U	430 U	380 U	1500 U	R
1,3-Dichlorobenzene	410 U	410 U	430 U	380 U	1500 U	R
1,4-Dichlorobenzene	410 U	410 U	430 U	380 U	1500 U	R
1,2-Dichlorobenzene	410 U	410 U	430 U	380 U	1500 U	R
2-Methylphenol	410 U	410 U	430 U	380 U	1500 U	R
2,2'-oxybis(1-Chloropropane	410 U	410 U	430 U	380 U	1500 U	R
4-Methylphenol	410 U	410 U	430 U	380 U	1500 U	R
N-Nitroso-di-n-propylamine	410 U	410 U	430 U	380 U	1500 U	R
Hexachloroethane	410 U	410 U	430 U	380 U	1500 U	R
Nitrobenzene	410 U	410 U	430 U	380 U	1500 U	R
Isophorone	410 U	410 U	430 U	380 U	1500 U	R
2-Nitrophenol	410 U	410 U	430 U	380 U	1500 U	R
2,4-Dimethylphenol	410 U	410 U	430 U	380 U	1500 U	R
bis(2-Chloroethoxy) methane	410 U	410 U	430 U	380 U	1500 U	R
2,4-Dichlorophenol	410 U	410 U	430 U	380 U	1500 U	R
1,2,4-Trichlorobenzene	410 U	410 U	430 U	380 U	1500 U	R
Naphthalene	410 U	410 U	430 U	22 J	1500 U	R
4-Chloroaniline	410 U	410 U	430 U	380 U	1500 U	R
Hexachlorobutadiene	410 U	410 U	430 U	380 U	1500 U	R
4-Chloro-3-methylphenol	410 U	410 U	430 U	380 U	1500 U	R
2-Methylnaphthalene	410 U	410 U	430 U	19 J	1500 U	R
Hexachlorocyclopentadiene	410 U	410 U	430 U	380 U	1500 U	R
2,4,6-Trichlorophenol	410 U	410 U	430 U	380 U	1500 U	R
2,4,5-Trichlorophenol	1000 U	1000 U	1000 U	920 U	3700 U	R
2-Chloronaphthalene	410 U	410 U	430 U	380 U	1500 U	R
2-Nitroaniline	1000 U	1000 U	1000 U	920 U	3700 U	R
Dimethylphthalate	410 U	410 U	430 U	380 U	1500 U	R
Acenaphthylene	410 U	410 U	430 U	380 U	1500 U	R
2,6-Dinitrotoluene	410 U	410 U	430 U	380 U	1500 U	R
3-Nitroaniline	1000 U	1000 U	1000 U	920 U	3700 U	R
Acenaphthene	410 U	410 U	430 U	72 J	1500 U	R
2,4-Dinitrophenol	1000 U	1000 U	1000 U	920 U	3700 U	R
4-Nitrophenol	1000 U	1000 U	1000 U	920 U	3700 U	R
Dibenzofuran	410 U	410 U	430 U	46 J	1500 U	R
2,4-Dinitrotoluene	410 U	410 U	430 U	380 U	1500 U	R

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
 Date: June 15th, 1995

LABORATORY: RECREA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECREA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABE5 Routine Sample SOIL/LOW 1.0 20	EABE5RE Routine Sample SOIL/LOW 1.0 20	EABE6 Routine Sample SOIL/LOW 1.0 23	EABE7 Routine Sample SOIL/LOW 1.0 13	EABE7DL Routine Sample SOIL/LOW 4.0 13	
BNA						
Diethylphthalate	25 J	26 J	24 J	25 J	1500 R	
4-Chlorophenyl-phenyl ether	410 U	410 U	430 U	380 U	1500 R	
Fluorene	410 U	410 U	430 U	90 J	83 J	
4-Nitroaniline	1000 U	1000 U	1000 U	920 U	3700 R	
4,6-Dinitro-2-methylphenol	1000 U	1000 U	1000 U	920 U	3700 R	
N-nitrosodiphenylamine	410 U	410 U	430 U	380 U	1500 R	
4-Bromophenyl-phenylether	410 U	410 U	430 U	380 U	1500 R	
Hexachlorobenzene	410 U	410 U	430 U	380 U	1500 R	
Pentachlorophenol	1000 U	1000 U	1000 U	920 U	3700 R	
Phenanthrene	120 J	120 J	97 J	910 J	880 J	
Anthracene	410 U	410 U	430 U	140 J	130 J	
Carbazole	410 U	410 U	430 U	86 J	83 J	
Di-n-butylphthalate	72 J	66 J	38 J	5600 J	6300 J	
Fluoranthene	280 J	260 J	250 J	950 J	1200 J	
Pyrene	200 J	310 J	150 J	2500 J	910 J	
Butylbenzylphthalate	260 J	270 J	24 J	1200 J	660 J	
3,3'-Dichlorobenzidine	410 U	410 UJ	430 U	380 R	1500 R	
Benzo(a)anthracene	120 J	120 J	120 J	460 J	400 J	
Chrysene	160 J	160 J	140 J	520 J	440 J	
bis(2-Ethylhexyl)phthalate	810	700 J	190 J	10000 J	6700 J	
Di-n-octylphthalate	92 J	60 J	430 U	220 J	240 J	
Benzo(b)fluoranthene	190 J	160 J	120 J	430 J	450 J	
Benzo(k)fluoranthene	150 J	140 J	180 J	510 J	620 J	
Benzo(a)pyrene	130 J	140 J	120 J	590 J	390 J	
Indeno(1,2,3-cd)pyrene	410 UJ	410 UJ	43 J	400 J	280 J	
Dibenz(a,h)anthracene	410 UJ	410 UJ	430 U	380 R	1500 R	
Benzo(g,h,i)perylene	410 UJ	410 UJ	430 U	440 J	230 J	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABE7RE Routine Sample SOIL/LOW 1.0 13	EABF4 Routine Sample SOIL/LOW 1.0 28	EABF4RE Routine Sample SOIL/LOW 1.0 28	EABF5 Routine Sample SOIL/LOW 1.0 9	EABF5RE Routine Sample SOIL/LOW 1.0 9	
BNA						
Phenol	380 U	460 U	460 U	360 U	360 U	360 U
bis(2-Chloroethyl) ether	380 U	460 U	460 U	360 U	360 U	360 U
2-Chlorophenol	380 U	460 U	460 U	360 U	360 U	360 U
1,3-Dichlorobenzene	380 U	460 U	460 U	360 U	360 U	360 U
1,4-Dichlorobenzene	380 U	460 U	460 U	360 U	360 U	360 U
1,2-Dichlorobenzene	380 U	460 U	460 U	360 U	360 U	360 U
2-Methylphenol	380 U	460 U	460 U	360 U	360 U	360 U
2,2'-oxybis(1-Chloropropane	380 U	460 U	460 U	360 U	360 U	360 U
4-Methylphenol	380 U	460 U	460 U	360 U	360 U	360 U
N-Nitroso-di-n-propylamine	380 U	460 U	460 U	360 U	360 U	360 U
Hexachloroethane	380 U	460 U	460 U	360 U	360 U	360 U
Nitrobenzene	380 U	460 U	460 U	360 U	360 U	360 U
Isophorone	380 U	460 U	460 U	360 U	360 U	360 U
2-Nitrophenol	380 U	460 U	460 U	360 U	360 U	360 U
2,4-Dimethylphenol	380 U	460 U	460 U	360 U	360 U	360 U
bis(2-Chloroethoxy) methane	380 U	460 U	460 U	360 U	360 U	360 U
2,4-Dichlorophenol	380 U	460 U	460 U	360 U	360 U	360 U
1,2,4-Trichlorobenzene	380 U	460 U	460 U	360 U	360 U	360 U
Naphthalene	22 J	460 U	460 U	360 U	360 U	360 U
4-Chloroaniline	380 U	460 U	460 U	360 U	360 U	360 U
Hexachlorobutadiene	380 U	460 U	460 U	360 U	360 U	360 U
4-Chloro-3-methylphenol	380 U	460 U	460 U	360 U	360 U	360 U
2-Methylnaphthalene	380 U	44 J	41 J	29 J	28 J	
Hexachlorocyclopentadiene	380 U	460 U	460 U	360 UJ	360 UJ	360 UJ
2,4,6-Trichlorophenol	380 U	460 U	460 U	360 U	360 U	360 U
2,4,5-Trichlorophenol	920 U	1100 U	1100 U	880 U	880 U	880 U
2-Chloronaphthalene	380 U	460 U	460 U	360 U	360 U	360 U
2-Nitroaniline	920 U	1100 U	1100 U	880 U	880 U	880 U
Dimethylphthalate	380 U	460 U	460 U	360 U	360 U	360 U
Acenaphthylene	380 U	460 U	460 U	360 U	360 U	360 U
2,6-Dinitrotoluene	380 U	460 U	460 U	360 U	360 U	360 U
3-Nitroaniline	920 U	1100 U	1100 U	880 U	880 U	880 U
Acenaphthene	72 J	460 U	460 U	26 J	28 J	
2,4-Dinitrophenol	920 U	1100 U	1100 U	880 U	880 U	880 U
4-Nitrophenol	920 UJ	1100 U	1100 UJ	880 UJ	880 UJ	880 UJ
Dibenzofuran	50 J	460 U	460 U	21 J	22 J	
2,4-Dinitrotoluene	380 U	460 U	460 U	360 U	360 U	360 U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET							
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON						
EPA SAMPLE NUMBER:	EABE7RE	EABF4	EABF4RE	EABF5	EABF5RE		
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:							
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample			
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW			
DILUTION FACTOR:	1.0	1.0	1.0	1.0			
PERCENT MOISTURE:	13	28	28	9			
BNA							
Diethylphthalate	25 J	28 J	31 J	360 U	360	360	U
4-Chlorophenyl-phenyl ether	380 U	460 U	460 U	360 U	360	360	U
Fluorene	93 J	460 U	460 U	21 J	20	J	
4-Nitroaniline	920 U	1100 U	1100 U	880 U	880	880	U
4,6-Dinitro-2-methylphenol	920 U	1100 U	1100 U	880 U	880	880	U
N-nitrosodiphenylamine	380 U	460 U	460 U	360 U	360	360	U
4-Bromophenyl-phenylether	380 U	460 U	460 U	360 U	360	360	U
Hexachlorobenzene	380 U	460 U	460 U	360 U	360	360	U
Pentachlorophenol	920 U	1100 U	1100 U	880 U	880	880	U
Phenanthrene	880	250 J	240 J	550	530	530	
Anthracene	140 J	26 J	460 U	68 J	68	J	
Carbazole	92 J	29 J	30 J	61 J	53	J	
Di-n-butylphthalate	4800	65 J	63 J	39 J	43	J	
Fluoranthene	1300	370 J	400 J	710	640	640	
Pyrene	1900 J	730 J	630 J	2700 J	2600	J	
Butylbenzylphthalate	980 J	460 UJ	62 J	360 UJ	360	R	
3,3'-Dichlorobenzidine	380 UJ	460 UJ	460 UJ	360 UJ	360	R	
Benzo(a)anthracene	430 J	160 J	180 J	620 J	650	J	
Chrysene	510 J	220 J	250 J	690 J	750	J	
bis(2-Ethylhexyl)phthalate	7700 J	200 J	220 J	90 J	91	J	
Di-n-octylphthalate	380 J	460 R	460 R	360 R	360	R	
Benzo(b)fluoranthene	570 J	250 J	190 J	890 J	890	J	
Benzo(k)fluoranthene	590 J	200 J	300 J	540 J	670	J	
Benzo(a)pyrene	530 J	190 J	260 J	680 J	880	J	
Indeno(1,2,3-cd)pyrene	260 J	210 J	200 J	970 J	1100	J	
Dibenz(a,h)anthracene	380 R	460 R	9 J	670 J	470	J	
Benzo(g,h,i)perylene	370 J	230 J	270 J	780 J	1200	J	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER:	EABF6	EABF6RE	EABF7	EABF7RE	EABF8	
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	
PERCENT MOISTURE:	18	18	22	22	17	
BNA						
Phenol	400 U	400 U	420 U	420 U	400 U	
bis(2-Chloroethyl) ether	400 U	400 U	420 U	420 U	400 U	
2-Chlorophenol	400 U	400 U	420 U	420 U	400 U	
1,3-Dichlorobenzene	400 U	400 U	420 U	420 U	400 U	
1,4-Dichlorobenzene	400 U	400 U	420 U	420 U	400 U	
1,2-Dichlorobenzene	400 U	400 U	420 U	420 U	400 U	
2-Methylphenol	400 U	400 U	420 U	420 U	400 U	
2,2'-oxybis(1-Chloropropane	400 U	400 U	420 U	420 U	400 U	
4-Methylphenol	400 U	400 U	420 U	420 U	400 U	
N-Nitroso-di-n-propylamine	400 U	400 U	420 U	420 U	400 U	
Hexachloroethane	400 U	400 U	420 U	420 U	400 U	
Nitrobenzene	400 U	400 U	420 U	420 U	400 U	
Isophorone	400 U	400 U	420 U	420 U	400 U	
2-Nitrophenol	400 U	400 U	420 U	420 U	400 U	
2,4-Dimethylphenol	400 U	400 U	420 U	420 U	400 U	
bis(2-Chloroethoxy) methane	400 U	400 U	420 U	420 U	400 U	
2,4-Dichlorophenol	400 U	400 U	420 U	420 U	400 U	
1,2,4-Trichlorobenzene	400 U	400 U	420 U	420 U	400 U	
Naphthalene	51 J	51 J	420 U	420 U	400 U	
4-Chloroaniline	400 U	400 U	420 U	420 U	400 U	
Hexachlorobutadiene	400 U	400 U	420 U	420 U	400 U	
4-Chloro-3-methylphenol	400 U	400 U	420 U	420 U	400 U	
2-Methylnaphthalene	140 J	140 J	420 U	420 U	400 U	
Hexachlorocyclopentadiene	400 U	400 U	420 U	420 U	400 U	
2,4,6-Trichlorophenol	400 U	400 U	420 U	420 U	400 U	
2,4,5-Trichlorophenol	980 U	980 U	1000 U	1000 U	960 U	
2-Chloronaphthalene	400 U	400 U	420 U	420 U	400 U	
2-Nitroaniline	980 U	980 U	1000 U	1000 U	960 U	
Dimethylphthalate	400 U	400 U	420 U	420 U	400 U	
Acenaphthylene	400 U	400 U	420 U	420 U	400 U	
2,6-Dinitrotoluene	400 U	400 U	420 U	420 U	400 U	
3-Nitroaniline	980 U	980 U	1000 U	1000 U	960 U	
Acenaphthene	400 U	400 U	420 U	420 U	400 U	
2,4-Dinitrophenol	980 U	980 U	1000 U	1000 U	960 U	
4-Nitrophenol	980 U	980 U	1000 U	1000 U	960 U	
Dibenzofuran	78 J	82 J	420 U	420 U	400 U	
2,4-Dinitrotoluene	400 U	400 U	420 U	420 U	400 U	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER:	EABF6	EABF6RE	EABF7	EABF7RE	EABF8	
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	
PERCENT MOISTURE:	18	18	22	22	17	
BNA						
Diethylphthalate	25 J	400 U	24 J	25 J	30 J	
4-Chlorophenyl-phenyl ether	400 U	400 U	420 U	420 U	400 U	
Fluorene	400 U	400 U	420 U	420 U	400 U	
4-Nitroaniline	980 U	980 U	1000 U	1000 U	960 U	
4,6-Dinitro-2-methylphenol	980 U	980 U	1000 U	1000 U	960 U	
N-nitrosodiphenylamine	21 J	400 U	420 U	420 U	400 U	
4-Bromophenyl-phenylether	400 U	400 U	420 U	420 U	400 U	
Hexachlorobenzene	400 U	400 U	420 U	420 U	400 U	
Pentachlorophenol	980 U	980 U	1000 U	1000 U	960 U	
Phenanthrene	560 J	560 J	180 J	170 J	140 J	
Anthracene	52 J	38 J	420 U	23 J	23 J	
Carbazole	35 J	34 J	420 U	420 U	400 U	
Di-n-butylphthalate	50 J	45 J	50 J	40 J	48 J	
Fluoranthene	360 J	330 J	400 J	320 J	290 J	
Pyrene	350 J	440 J	230 J	330 J	170 J	
Butylbenzylphthalate	400 UJ	400 UJ	420 U	420 UJ	61 J	
3,3'-Dichlorobenzidine	400 UJ	400 UJ	420 U	420 UJ	400 U	
Benzo(a)anthracene	170 J	170 J	160 J	160 J	120 J	
Chrysene	240 J	240 J	210 J	200 J	150 J	
bis(2-Ethylhexyl)phthalate	52 J	59 J	94 J	81 J	1900	
Di-n-octylphthalate	400 UJ	400 UJ	420 UJ	420 UJ	570 J	
Benzo(b)fluoranthene	190 J	150 J	230 J	220 J	130 J	
Benzo(k)fluoranthene	220 J	220 J	200 J	180 J	160 J	
Benzo(a)pyrene	130 J	160 J	180 J	180 J	89 J	
Indeno(1,2,3-cd)pyrene	400 UJ	150 J	73 J	120 J	400 UJ	
Dibenz(a,h)anthracene	400 UJ	400 UJ	420 UJ	420 UJ	400 UJ	
Benzo(g,h,i)perylene	400 UJ	400 UJ	63 J	140 J	400 UJ	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
SDG NO: EABE5	EABF8RE	EABF9	EABF9RE	EABG1	EXQ92	
EPA SAMPLE NUMBER:						
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	
PERCENT MOISTURE:	17	25	25	13	24	
BNA						
Phenol	400 U	440 U	440 U	380 U	430 UJ	
bis(2-Chloroethyl) ether	400 U	440 U	440 U	380 U	430 UJ	
2-Chlorophenol	400 U	440 U	440 U	380 U	430 UJ	
1,3-Dichlorobenzene	400 U	440 U	440 U	380 U	430 UJ	
1,4-Dichlorobenzene	400 U	440 U	440 U	380 U	430 UJ	
1,2-Dichlorobenzene	400 U	440 U	440 U	380 U	430 UJ	
2-Methylphenol	400 U	440 U	440 U	380 U	430 UJ	
2,2'-oxybis(1-Chloropropane	400 U	440 U	440 U	380 U	430 UJ	
4-Methylphenol	400 U	440 U	440 U	380 U	430 UJ	
N-Nitroso-di-n-propylamine	400 U	440 U	440 U	380 U	430 UJ	
Hexachloroethane	400 U	440 U	440 U	380 U	430 UJ	
Nitrobenzene	400 U	440 U	440 U	380 U	430 UJ	
Isophorone	400 U	440 U	440 U	380 U	430 UJ	
2-Nitrophenol	400 U	440 U	440 U	380 U	430 UJ	
2,4-Dimethylphenol	400 U	440 U	440 U	380 U	430 UJ	
bis(2-Chloroethoxy) methane	400 U	440 U	440 U	380 U	430 UJ	
2,4-Dichlorophenol	400 U	440 U	440 U	380 U	430 UJ	
1,2,4-Trichlorobenzene	400 U	440 U	440 U	380 U	430 UJ	
Naphthalene	400 U	440 U	440 U	380 U	71 J	
4-Chloroaniline	400 U	440 U	440 U	380 U	430 UJ	
Hexachlorobutadiene	400 U	440 U	440 U	380 U	430 UJ	
4-Chloro-3-methylphenol	400 U	440 U	440 U	380 U	430 UJ	
2-Methylnaphthalene	400 U	440 U	440 U	380 U	55 J	
Hexachlorocyclopentadiene	400 U	440 U	440 U	380 U	430 UJ	
2,4,6-Trichlorophenol	400 U	440 U	440 U	380 U	430 UJ	
2,4,5-Trichlorophenol	960 U	1100 U	1100 U	920 U	1000 U	
2-Chloronaphthalene	400 U	440 U	440 U	380 U	430 UJ	
2-Nitroaniline	960 U	1100 U	1100 U	920 U	1000 U	
Dimethylphthalate	400 U	440 U	440 U	380 U	430 UJ	
Acenaphthylene	400 U	440 U	440 U	380 U	430 UJ	
2,6-Dinitrotoluene	400 U	440 U	440 U	380 U	430 UJ	
3-Nitroaniline	960 U	1100 U	1100 U	920 U	1000 U	
Acenaphthene	400 U	440 U	440 U	380 U	78 J	
2,4-Dinitrophenol	960 U	1100 U	1100 U	920 U	1000 U	
4-Nitrophenol	960 U	1100 U	1100 UJ	920 U	1000 U	
Dibenzofuran	400 U	440 U	440 U	380 U	87 J	
2,4-Dinitrotoluene	400 U	440 U	440 U	380 U	430 UJ	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABF8RE Routine Sample SOIL/LOW 1.0 17	EABF9 Routine Sample SOIL/LOW 1.0 25	EABF9RE Routine Sample SOIL/LOW 1.0 25	EABG1 Routine Sample SOIL/LOW 1.0 13	EXQ92 Routine Sample SOIL/LOW 1.0 24	
BNA						
Diethylphthalate	28 J	27 J	30 J	380 U	430 U	
4-Chlorophenyl-phenyl ether	400 U	440 U	440 U	380 U	430 U	
Fluorene	400 U	440 U	440 U	380 U	150 J	
4-Nitroaniline	960 U	1100 U	1100 U	920 U	1000 U	
4,6-Dinitro-2-methylphenol	960 U	1100 U	1100 U	920 U	1000 UJ	
N-nitrosodiphenylamine	400 U	440 U	440 U	380 U	430 UJ	
4-Bromophenyl-phenylether	400 U	440 U	440 U	380 U	430 UJ	
Hexachlorobenzene	400 U	81 J	74 J	380 U	130 J	
Pentachlorophenol	960 U	1100 U	1100 U	920 U	1000 UJ	
Phenanthrene	140 J	120 J	120 J	21 J	1300 J	
Anthracene	21 J	440 U	440 U	380 U	220 J	
Carbazole	400 U	440 U	440 U	380 U	180 J	
Di-n-butylphthalate	43 J	54 J	58 J	380 U	28 J	
Fluoranthene	260 J	250 J	260 J	41 J	1500 J	
Pyrene	290 J	390 J	320 J	23 J	1300 J	
Butylbenzylphthalate	57 J	140 J	440 UJ	380 U	79 J	
3,3'-Dichlorobenzidine	400 UJ	440 UJ	440 UJ	380 U	430 UJ	
Benzo(a)anthracene	120 J	130 J	120 J	22 J	600 J	
Chrysene	160 J	170 J	180 J	31 J	640 J	
bis(2-Ethylhexyl)phthalate	1700 J	540 J	490 J	20 J	260 J	
Di-n-octylphthalate	440 J	440 R	440 UJ	380 U	430 UJ	
Benzo(b)fluoranthene	170 J	150 J	160 J	380 U	520 J	
Benzo(k)fluoranthene	150 J	180 J	220 J	380 U	570 J	
Benzo(a)pyrene	130 J	140 J	140 J	380 U	510 J	
Indeno(1,2,3-cd)pyrene	400 UJ	130 J	200 J	380 U	300 J	
Dibenz(a,h)anthracene	400 UJ	440 R	440 UJ	380 U	430 UJ	
Benzo(g,h,i)perylene	400 UJ	180 J	220 J	380 U	310 J	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EXQ92RE Routine Sample SOIL/LOW 1.0 24	EXQ93 Routine Sample SOIL/LOW 1.0 25	EXQ93RE Routine Sample SOIL/LOW 1.0 25	EXQ94 Routine Sample SOIL/LOW 1.0 23	EXQ94RE Routine Sample SOIL/LOW 1.0 23	
BNA						
Phenol	430 U	440 U	440 U	430 U	430 U	430 U
bis(2-Chloroethyl) ether	430 U	440 U	440 U	430 U	430 U	430 U
2-Chlorophenol	430 U	440 U	440 U	430 U	430 U	430 U
1,3-Dichlorobenzene	430 U	440 U	440 U	430 U	430 U	430 U
1,4-Dichlorobenzene	430 U	440 U	440 U	430 U	430 U	430 U
1,2-Dichlorobenzene	430 U	440 U	440 U	430 U	430 U	430 U
2-Methylphenol	430 U	440 U	440 U	430 U	430 U	430 U
2,2'-oxybis(1-Chloropropane	430 U	440 U	440 U	430 U	430 U	430 U
4-Methylphenol	430 U	440 U	440 U	430 U	430 U	430 U
N-Nitroso-di-n-propylamine	430 U	440 U	440 U	430 U	430 U	430 U
Hexachloroethane	430 U	440 U	440 U	430 U	430 U	430 U
Nitrobenzene	430 U	440 U	440 U	430 U	430 U	430 U
Isophorone	430 U	440 U	440 U	430 U	430 U	430 U
2-Nitrophenol	430 U	440 U	440 U	430 U	430 U	430 U
2,4-Dimethylphenol	430 U	440 U	440 U	430 U	430 U	430 U
bis(2-Chloroethoxy) methane	430 U	440 U	440 U	430 U	430 U	430 U
2,4-Dichlorophenol	430 U	440 U	440 U	430 U	430 U	430 U
,2,4-Trichlorobenzene	430 U	440 U	440 U	430 U	430 U	430 U
Naphthalene	71 J	440 U	440 U	26 J	26 J	25 J
4-Chloroaniline	430 U	440 U	440 U	430 U	430 U	430 U
Hexachlorobutadiene	430 U	440 U	440 U	430 U	430 U	430 U
4-Chloro-3-methylphenol	430 U	440 U	440 U	430 U	430 U	430 U
2-Methylnaphthalene	52 J	440 U	440 U	44 J	44 J	45 J
Hexachlorocyclopentadiene	430 U	440 U	440 U	430 U	430 U	430 U
2,4,6-Trichlorophenol	430 U	440 U	440 U	430 U	430 U	430 U
2,4,5-Trichlorophenol	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
2-Chloronaphthalene	430 U	440 U	440 U	430 U	430 U	430 U
2-Nitroaniline	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
Dimethylphthalate	430 U	440 U	440 U	430 U	430 U	430 U
Acenaphthylene	430 U	440 U	440 U	430 U	430 U	430 U
2,6-Dinitrotoluene	430 U	440 U	440 U	430 U	430 U	430 U
3-Nitroaniline	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
Acenaphthene	77 J	440 U	23 J	430 U	430 U	430 U
2,4-Dinitrophenol	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
4-Nitrophenol	1000 U	1100 U	1100 UJ	1000 U	1000 U	1000 UJ
Dibenzofuran	83 J	440 U	440 U	430 U	430 U	430 U
2,4-Dinitrotoluene	430 U	440 U	440 U	430 U	430 U	430 U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
SDG NO: EABE5	EXQ92RE	EXQ93	EXQ93RE	EXQ94	EXQ94RE	
EPA SAMPLE NUMBER:						
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0	
PERCENT MOISTURE:	24	25	25	23	23	
BNA						
Diethylphthalate	430 U	26 J	27 J	430 U	430 U	430 U
4-Chlorophenyl-phenyl ether	430 U	440 U	440 U	430 U	430 U	430 U
Fluorene	150 J	440 U	440 U	430 U	430 U	430 U
4-Nitroaniline	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
4,6-Dinitro-2-methylphenol	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
N-nitrosodiphenylamine	430 U	440 U	440 U	430 U	430 U	430 U
4-Bromophenyl-phenylether	430 U	440 U	440 U	430 U	430 U	430 U
Hexachlorobenzene	140 J	440 U	440 U	430 U	430 U	430 U
Pentachlorophenol	1000 U	1100 U	1100 U	1000 U	1000 U	1000 U
Phenanthrene	1300	320 J	310 J	200 J	190 J	
Anthracene	210 J	48 J	39 J	430 U	430 U	
Carbazole	170 J	42 J	45 J	24 J	24 J	
Di-n-butylphthalate	25 J	63 J	63 J	260 J	260 J	
Fluoranthene	1300	600	620	330 J	350 J	
Pyrene	2100 J	780 J	830 J	630 J	520 J	
Butylbenzylphthalate	430 UJ	440 UJ	440 UJ	430 UJ	210 J	
3,3'-Dichlorobenzidine	430 UJ	440 UJ	440 UJ	430 UJ	430 UJ	
Benzo(a)anthracene	570 J	270 J	280 J	180 J	180 J	
Chrysene	640 J	340 J	340 J	250 J	240 J	
bis(2-Ethylhexyl)phthalate	240 J	150 J	160 J	730 J	700 J	
Di-n-octylphthalate	430 R	440 R	440 UJ	430 R	35 J	
Benzo(b)fluoranthene	500 J	300 J	300 J	240 J	190 J	
Benzo(k)fluoranthene	510 J	330 J	370 J	200 J	330 J	
Benzo(a)pyrene	500 J	300 J	290 J	240 J	280 J	
Indeno(1,2,3-cd)pyrene	320 J	270 J	230 J	190 J	170 J	
Dibenz(a,h)anthracene	430 R	150 J	440 UJ	430 R	430 R	
Benzo(g,h,i)perylene	400 J	270 J	220 J	170 J	150 J	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET							SITE: LABORATORY: RECRA ENVIRON	
CASE NO: 23525 SDG NO: EABE5	EXQ95	EXQ95DL	EXQ95RE	EXQ96	EXQ96DL			
EPA SAMPLE NUMBER:								
REGIONAL SAMPLE NUMBER:								
SAMPLE LOCATION:								
SAMPLE TYPE:	Routine Sample							
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW			
DILUTION FACTOR:	1.0	2.0	1.0	1.0	2.0			
PERCENT MOISTURE:	23	23	23	23	23			
BNA								
Phenol	430 U	860 R	430 U	430 U	430 U	860 R		
bis(2-Chloroethyl) ether	430 U	860 R	430 U	430 U	430 U	860 R		
2-Chlorophenol	430 U	860 R	430 U	430 U	430 U	860 R		
1,3-Dichlorobenzene	430 U	860 R	430 U	430 U	430 U	860 R		
1,4-Dichlorobenzene	430 U	860 R	430 U	430 U	430 U	860 R		
1,2-Dichlorobenzene	430 U	860 R	430 U	430 U	430 U	860 R		
2-Methylphenol	430 U	860 R	430 U	430 U	430 U	860 R		
2,2'-oxybis(1-Chloropropane	430 U	860 R	430 U	430 U	430 U	860 R		
4-Methylphenol	430 U	860 R	430 U	430 U	430 U	860 R		
N-Nitroso-di-n-propylamine	430 U	860 R	430 U	430 U	430 U	860 R		
Hexachloroethane	430 U	860 R	430 U	430 U	430 U	860 R		
Nitrobenzene	430 U	860 R	430 U	430 U	430 U	860 R		
Isophorone	430 U	860 R	430 U	430 U	430 U	860 R		
2-Nitrophenol	430 U	860 R	430 U	430 U	430 U	860 R		
2,4-Dimethylphenol	430 U	860 R	430 U	430 U	430 U	860 R		
bis(2-Chloroethoxy) methane	430 U	860 R	430 U	430 U	430 U	860 R		
2,4-Dichlorophenol	430 U	860 R	430 U	430 U	430 U	860 R		
,2,4-Trichlorobenzene	430 U	860 R	430 U	430 U	430 U	860 R		
Naphthalene	70 J	64 J	71 J	430 U	430 U	860 R		
4-Chloroaniline	430 U	860 R	430 U	430 U	430 U	860 R		
Hexachlorobutadiene	430 U	860 R	430 U	430 U	430 U	860 R		
4-Chloro-3-methylphenol	430 U	860 R	430 U	430 U	430 U	860 R		
2-Methylnaphthalene	79 J	72 J	73 J	430 U	430 U	860 R		
Hexachlorocyclopentadiene	430 U	860 R	430 UJ	430 U	430 U	860 R		
2,4,6-Trichlorophenol	430 U	860 R	430 U	430 U	430 U	860 R		
2,4,5-Trichlorophenol	1000 U	2100 R	1000 U	1000 U	1000 U	2100 R		
2-Choronaphthalene	430 U	860 R	430 U	430 U	430 U	860 R		
2-Nitroaniline	1000 U	2100 R	1000 U	1000 U	1000 U	2100 R		
Dimethylphthalate	430 U	860 R	430 U	430 U	430 U	860 R		
Acenaphthylene	430 U	860 R	430 U	430 U	430 U	860 R		
2,6-Dinitrotoluene	430 U	860 R	430 U	430 U	430 U	860 R		
3-Nitroaniline	1000 U	2100 R	1000 U	1000 U	1000 U	2100 R		
Acenaphthene	230 J	220 J	220 J	170 J	170 J	150 J		
2,4-Dinitrophenol	1000 U	2100 R	1000 U	1000 U	1000 U	2100 R		
4-Nitrophenol	1000 UJ	2100 R	1000 UJ	1000 UJ	1000 UJ	2100 R		
Dibenzofuran	130 J	110 J	110 J	86 J	86 J	76 J		
2,4-Dinitrotoluene	430 U	860 R	430 U	430 U	430 U	860 R		

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

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CASE #: 23525

SDG #: EABES

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET							SITE: LABORATORY: RECRA ENVIRON	
CASE NO: 23525 SDG NO: EABES	EXQ95	EXQ95OL	EXQ95RE	EXQ96	EXQ96DL			
EPA SAMPLE NUMBER:								
REGIONAL SAMPLE NUMBER:								
SAMPLE LOCATION:								
SAMPLE TYPE:	Routine Sample							
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW			
DILUTION FACTOR:	1.0	2.0	1.0	1.0	2.0			
PERCENT MOISTURE:	23	23	23	23	23			
BNA								
Diethylphthalate	430 U	860 R	430 U	430 U	860 R			
4-Chlorophenyl-phenyl ether	430 U	860 R	430 U	430 U	860 R			
Fluorene	230 J	210 J	220 J	190 J	180 J			
4-Nitroaniline	1000 U	2100 R	1000 U	1000 U	2100 R			
4,6-Dinitro-2-methylphenol	1000 U	2100 R	1000 U	1000 U	2100 R			
N-nitrosodiphenylamine	430 U	860 R	430 U	430 U	860 R			
4-Bromophenyl-phenylether	430 U	860 R	430 U	430 U	860 R			
Hexachlorobenzene	430 U	860 R	430 U	430 U	860 R			
Pentachlorophenol	1000 U	2100 R	1000 U	1000 U	2100 R			
Phenanthrene	2400	2600 J	2600	2100	2100 J			
Anthracene	360 J	350 J	360 J	360 J	320 J			
Carbazole	390 J	330 J	360 J	270 J	220 J			
Di-n-butylphthalate	29 J	860 R	30 J	31 J	860 R			
Fluoranthene	3500	3500 J	3600	3200	3500 J			
Pyrene	5500 J	3100 J	4800	5700 J	2900 J			
Butylbenzylphthalate	68 J	860 R	66 J	430 UJ	70 J			
3,3'-Dichlorobenzidine	430 UJ	860 R	430 UJ	430 UJ	860 R			
benzo(a)anthracene	1400 J	1400 J	1300	1300 J	1200 J			
Chrysene	1700 J	1600 J	1600	1600 J	1400 J			
bis(2-Ethylhexyl)phthalate	850 J	680 J	810	2600 J	2000 J			
Di-n-octylphthalate	26 J	860 R	430 UJ	52 J	860 R			
Benzo(b)fluoranthene	1500 J	1200 J	1700 J	1500 J	1500 J			
Benzo(k)fluoranthene	1600 J	1700 J	1200 J	1500 J	1700 J			
Benzo(a)pyrene	1400 J	1200 J	1300 J	1100 J	1300 J			
Indeno(1,2,3-cd)pyrene	700 J	660 J	790 J	840 J	710 J			
Dibenz(a,h)anthracene	570 J	310 J	280 J	890 J	370 J			
Benzo(g,h,i)perylene	620 J	440 J	680 J	1100 J	640 J			

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk, Lockheed/ESAT
 Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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CASE NO: 23525 SDG NO: EABE5	TCL QUALIFIED SPREADSHEET					
	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EXQ96RE Routine Sample SOIL/LOW 1.0 23	EXQ97 Routine Sample SOIL/LOW 1.0 29	EXQ97MS Matrix Spike SOIL/LOW 1.0 29	EXQ97MSD Matrix Spike Du SOIL/LOW 1.0 29	EXQ98 Routine Sample SOIL/LOW 1.0 12	
BNA						
Phenol	430 U	460 U	4700	4600	380 U	
bis(2-Chloroethyl) ether	430 U	460 U	460 U	460 U	380 U	
2-Chlorophenol	430 U	460 U	4100	4000	380 U	
1,3-Dichlorobenzene	430 U	460 U	460 U	460 U	380 U	
1,4-Dichlorobenzene	430 U	460 U	3400	3300	380 U	
1,2-Dichlorobenzene	430 U	460 U	460 U	460 U	380 U	
2-Methylphenol	430 U	460 U	460 U	460 U	380 U	
2,2'-oxybis(1-Chloropropane	430 U	460 U	460 U	460 U	380 U	
4-Methylphenol	430 U	460 U	460 U	460 U	380 U	
N-Nitroso-di-n-propylamine	430 U	460 U	3000	2900	380 U	
Hexachloroethane	430 U	460 U	460 U	460 U	380 U	
Nitrobenzene	430 U	460 U	460 U	460 U	380 U	
Isophorone	430 U	460 U	460 U	460 U	380 U	
2-Nitrophenol	430 U	460 U	460 U	460 U	380 U	
2,4-Dimethylphenol	430 U	460 U	460 U	460 U	380 U	
bis(2-Chloroethoxy) methane	430 U	460 U	460 U	460 U	380 U	
2,4-Dichlorophenol	430 U	460 U	460 U	460 U	380 U	
1,2,4-Trichlorobenzene	430 U	460 U	2700	2700	380 U	
Naphthalene	430 U	24 J	37 J	32 J	380 U	
4-Chloroaniline	430 U	460 U	460 U	460 U	380 U	
Hexachlorobutadiene	430 U	460 U	460 U	460 U	380 U	
4-Chloro-3-methylphenol	430 U	460 U	4500	4500	380 U	
2-Methylnaphthalene	430 U	44 J	78 J	65 J	380 U	
Hexachlorocyclopentadiene	430 UJ	460 U	460 U	460 U	380 U	
2,4,6-Trichlorophenol	430 U	460 U	460 U	460 U	380 U	
2,4,5-Trichlorophenol	1000 U	1100 U	1100 U	1100 U	910 U	
2-Chloronaphthalene	430 U	460 U	460 U	460 U	380 U	
2-Nitroaniline	1000 U	1100 U	1100 U	1100 U	910 U	
Dimethylphthalate	430 U	460 U	460 U	460 U	380 U	
Acenaphthylene	430 U	460 U	460 U	460 U	380 U	
2,6-Dinitrotoluene	430 U	460 U	460 U	460 U	380 U	
3-Nitroaniline	1000 U	1100 U	1100 U	1100 U	910 U	
Acenaphthene	170 J	460 U	2800	2800	380 U	
2,4-Dinitrophenol	1000 U	1100 U	1100 U	1100 U	910 U	
4-Nitrophenol	1000 UJ	1100 U	6300 J	6000 J	910 U	
Dibenzofuran	78 J	460 U	460 U	460 U	380 U	
2,4-Dinitrotoluene	430 U	460 U	3500	3300	380 U	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET							SITE: LABORATORY: RECRA ENVIRON	
CASE NO: 23525 SDG NO: EABE5	EXQ96RE	EXQ97	EXQ97MS	EXQ97MSD	EXQ98			
EPA SAMPLE NUMBER:								
REGIONAL SAMPLE NUMBER:								
SAMPLE LOCATION:								
SAMPLE TYPE:	Routine Sample	Routine Sample	Matrix Spike	Matrix Spike Du	Routine Sample			
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW	SOIL/LOW			
DILUTION FACTOR:	1.0	1.0	1.0	1.0	1.0			
PERCENT MOISTURE:	23	29	29	29	12			
BNA								
Diethylphthalate	430 U	460 U	460 U	460 U	460 U	380 U		
4-Chlorophenyl-phenyl ether	430 U	460 U	460 U	460 U	460 U	380 U		
Fluorene	190 J	460 U	460 U	460 U	460 U	380 U		
4-Nitroaniline	1000 U	1100 U	1100 U	1100 U	1100 U	910 U		
4,6-Dinitro-2-methylphenol	1000 U	1100 UJ	1100 U	1100 U	1100 U	910 U		
N-nitrosodiphenylamine	430 U	460 UJ	460 U	460 U	460 U	380 U		
4-Bromophenyl-phenylether	430 U	460 UJ	460 U	460 U	460 U	380 U		
Hexachlorobenzene	430 U	460 UJ	460 U	460 U	460 U	380 U		
Pentachlorophenol	1000 U	1100 UJ	5100	5100	5100	910 U		
Phenanthrene	2300	250 J	310 J	270 J	270 J	75 J		
Anthracene	370 J	29 J	28 J	26 J	26 J	380 U		
Carbazole	240 J	28 J	34 J	35 J	35 J	380 U		
Di-n-butylphthalate	35 J	32 J	24 J	36 J	36 J	380 U		
Fluoranthene	3500	340 J	420 J	390 J	390 J	120 J		
Pyrene	5400	870 J	7800 J	7900 J	7900 J	48 J		
Butylbenzylphthalate	100 J	460 R	460 UJ	460 UJ	460 UJ	380 U		
3,3'-Dichlorobenzidine	430 UJ	460 R	460 UJ	460 UJ	460 UJ	380 U		
benzo(a)anthracene	1300	180 J	190 J	160 J	160 J	36 J		
Chrysene	1500	250 J	260 J	250 J	250 J	66 J		
bis(2-Ethylhexyl)phthalate	2600	230 J	250 J	300 J	300 J	380 U		
Di-n-octylphthalate	60 J	460 R	460 R	460 R	460 R	380 U		
Benzo(b)fluoranthene	1400 J	300 J	250 J	290 J	290 J	20 J		
Benzo(k)fluoranthene	1300 J	190 J	310 J	330 J	330 J	30 J		
Benzo(a)pyrene	1200 J	240 J	320 J	330 J	330 J	380 U		
Indeno(1,2,3-cd)pyrene	870 J	240 J	160 J	230 J	230 J	380 U		
Dibenz(a,h)anthracene	460 J	460 R	460 R	460 R	460 R	380 U		
Benzo(g,h,i)perylene	620 J	270 J	460 R	460 R	460 R	380 U		

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

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CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

TCL QUALIFIED SPREADSHEET					
CASE NO: 23525 SDG NO: EABE5	EXQ99	SBLK1	SITE: LABORATORY: RECRA ENVIRON		
EPA SAMPLE NUMBER:					
REGIONAL SAMPLE NUMBER:					
SAMPLE LOCATION:					
SAMPLE TYPE:	Routine Sample	Method Blank			
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW			
DILUTION FACTOR:	1.0	1.0			
PERCENT MOISTURE:	13				
BNA					
Phenol	380	U	330	U	
bis(2-Chloroethyl) ether	380	U	330	U	
2-Chlorophenol	380	U	330	U	
1,3-Dichlorobenzene	380	U	330	U	
1,4-Dichlorobenzene	380	U	330	U	
1,2-Dichlorobenzene	380	U	330	U	
2-Methylphenol	380	U	330	U	
2,2'-oxybis(1-Chloropropane	380	U	330	U	
4-Methylphenol	380	U	330	U	
N-Nitroso-di-n-propylamine	380	U	330	U	
Hexachloroethane	380	U	330	U	
Nitrobenzene	380	U	330	U	
Isophorone	380	U	330	U	
2-Nitrophenol	380	U	330	U	
2,4-Dimethylphenol	380	U	330	U	
bis(2-Chloroethoxy) methane	380	U	330	U	
2,4-Dichlorophenol	380	U	330	U	
1,2,4-Trichlorobenzene	380	U	330	U	
Naphthalene	380	U	330	U	
4-Chloroaniline	380	U	330	U	
Hexachlorobutadiene	380	U	330	U	
4-Chloro-3-methylphenol	380	U	330	U	
2-Methylnaphthalene	380	U	330	U	
Hexachlorocyclopentadiene	380	U	330	U	
2,4,6-Trichlorophenol	380	U	330	U	
2,4,5-Trichlorophenol	920	U	800	U	
2-Chloronaphthalene	380	U	330	U	
2-Nitroaniline	920	U	800	U	
Dimethylphthalate	380	U	330	U	
Acenaphthylene	380	U	330	U	
2,6-Dinitrotoluene	380	U	330	U	
3-Nitroaniline	920	U	800	U	
Acenaphthene	380	U	330	U	
2,4-Dinitrophenol	920	U	800	U	
4-Nitrophenol	920	U	800	U	
Dibenzofuran	380	U	330	U	
2,4-Dinitrotoluene	380	U	330	U	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

CADRE REVIEW 2.1

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET			
CASE NO: 23525 SDG NO: EABE5		SITE: LABORATORY: RECRA ENVIRON	
EPA SAMPLE NUMBER:	EXQ99	SBLK1	
REGIONAL SAMPLE NUMBER:			
SAMPLE LOCATION:			
SAMPLE TYPE:	Routine Sample	Method Blank	
MATRIX/ANALYSIS:	SOIL/LOW	SOIL/LOW	
DILUTION FACTOR:	1.0	1.0	
PERCENT MOISTURE:	13		
BNA			
Diethylphthalate	380	U	330 U
4-Chlorophenyl-phenyl ether	380	U	330 U
Fluorene	380	U	330 U
4-Nitroaniline	920	U	800 U
4,6-Dinitro-2-methylphenol	920	U	800 U
N-nitrosodiphenylamine	380	U	330 U
4-Bromophenyl-phenylether	380	U	330 U
Hexachlorobenzene	380	U	330 U
Pentachlorophenol	920	U	800 U
Phenanthrene	22	J	330 U
Anthracene	380	U	330 U
Carbazole	380	U	330 U
Di-n-butylphthalate	380	U	330 U
Fluoranthene	24	J	330 U
Pyrene	380	U	330 U
Butylbenzylphthalate	380	U	330 U
3,3'-Dichlorobenzidine	380	U	330 U
Benzo(a)anthracene	380	U	330 U
Chrysene	380	U	330 U
bis(2-Ethylhexyl)phthalate	24	J	330 U
Di-n-octylphthalate	380	U	330 U
Benzo(b)fluoranthene	380	U	330 U
Benzo(k)fluoranthene	380	U	330 U
Benzo(a)pyrene	380	U	330 U
Indeno(1,2,3-cd)pyrene	380	U	330 U
Dibenz(a,h)anthracene	380	U	330 U
Benzo(g,h,i)perylene	380	U	330 U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABES
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABES	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABE5 Routine Sample SOIL/ 10.0 20	EABE5DL Routine Sample SOIL/ 100.0 20	EABE6 Routine Sample SOIL/ 1.0 13	EABE7 Routine Sample SOIL/ 4.0 13	EABF4 Routine Sample SOIL/ 2.0 28	
PES						
alpha-BHC	21 U	210 U	2.0 U	7.8 U	4.7 U	
beta-BHC	21 U	210 U	2.0 U	7.8 U	4.7 U	
delta-BHC	21 U	210 U	2.0 U	7.8 U	4.7 U	
gamma-BHC (Lindane)	21 U	210 U	2.0 U	7.8 U	4.7 U	
Heptachlor	29 J	26 DJ	2.0 U	7.8 U	4.7 U	
Aldrin	21 U	210 U	1.2 J	7.8 U	4.7 U	
Heptachlor epoxide	400 J	490 U	2.4	1.0 J	2.9 J	
Endosulfan I	21 U	210 U	2.0 U	6.8 J	4.7 U	
Dieldrin	41 U	410 U	3.8 U	15 U	9.2 U	
4,4'-DDE	17 J	410 U	3.6 J	14 J	70	
Endrin	41 U	410 U	8.1	15 U	9.2 U	
Endosulfan II	41 U	410 U	3.8 U	15 U	9.2 U	
4,4'-DDD	25 J	410 U	3.8 U	15 U	1.8 J	
Endosulfan sulfate	4.3 J	410 U	1.4 J	2.4 J	7.4 J	
4,4'-DDT	62 J	54 DJ	3.2 J	30	120	
Methoxychlor	210 U	2100 U	20 U	78 U	47 U	
Endrin ketone	41 U	410 U	0.85 J	15 U	9.2 U	
Endrin aldehyde	41 U	410 U	3.8 U	15 U	9.2 U	
alpha-Chlordane	900 J	1200 U	1.8 J	6.4 J	2.9 J	
gamma-Chlordane	670 J	820 U	0.52 J	2.6 J	0.94 J	
Toxaphene	2100 U	21000 U	200 U	780 U	470 U	
Aroclor-1016	410 U	4100 U	38 U	150 U	92 U	
Aroclor-1221	840 U	8400 U	77 U	310 U	190 U	
Aroclor-1232	410 U	4100 U	38 U	150 U	92 U	
Aroclor-1242	410 U	4100 U	38 U	150 U	92 U	
Aroclor-1248	410 U	4100 U	38 U	150 U	92 U	
Aroclor-1254	410 U	4100 U	18 J	200	39 J	
Aroclor-1260	410 U	4100 U	35 J	85 J	99	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD

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CASE #: 23525

SDG #: EABE5

SITE NAME: U.S. Steel Waukegan (IL)

CASE NO: 23525 SDG NO: EABE5		TCL QUALIFIED SPREADSHEET					
		SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EABF5	EABF6	EABF7	EABF7DL	EABFB		
Routine Sample SOIL/ 4.0 9	Routine Sample SOIL/ 4.0 18	Routine Sample SOIL/ 10.0 22	Routine Sample SOIL/ 100.0 22	Routine Sample SOIL/ 2.0 17			
PES							
alpha-BHC	7.5 UJ	8.3 U	22 U	220 U	4.1 U		
beta-BHC	7.5 UJ	8.3 U	22 U	220 U	4.1 U		
delta-BHC	7.5 UJ	1.2 J	22 U	220 U	4.1 U		
gamma-BHC (Lindane)	7.5 UJ	8.3 U	22 U	220 U	4.1 U		
Heptachlor	7.5 UJ	2.5 J	140 J	130 DJ	1.2 J		
Aldrin	7.5 UJ	8.3 U	22 U	220 U	4.1 U		
Heptachlor epoxide	15 J	3.1 J	440 J	560 U	38		
Endosulfan I	7.5 UJ	8.3 U	22 U	220 U	4.1 U		
Dieldrin	14 UJ	16 U	42 U	420 U	7.8 J		
4,4'-DDE	5.3 J	5.2 J	42 U	420 U	47		
Endrin	14 UJ	16 U	42 U	420 U	8.0 U		
Endosulfan II	14 UJ	16 U	42 U	420 U	8.0 U		
4,4'-DDD	14 UJ	16 U	34 J	420 U	5.9 J		
Endosulfan sulfate	9.1 J	17 J	42 U	420 U	3.6 J		
4,4'-DDT	40 J	16 U	42 U	420 U	60		
Methoxychlor	75 UJ	83 U	220 U	2200 U	41 U		
Endrin ketone	7.8 J	9.7 J	42 U	420 U	8.0 U		
Endrin aldehyde	14 UJ	4.8 J	42 U	420 U	8.0 U		
alpha-Chlordane	7.5 UJ	8.3 U	1200 J	1600 D	130		
gamma-Chlordane	2.6 J	3.3 J	940 J	1200 D	74		
Toxaphene	750 UJ	830 U	2200 U	22000 U	410 U		
Aroclor-1016	140 UJ	160 U	420 U	4200 U	80 U		
Aroclor-1221	290 UJ	330 U	860 U	8600 U	160 U		
Aroclor-1232	140 UJ	160 U	420 U	4200 U	80 U		
Aroclor-1242	140 UJ	160 U	420 U	4200 U	80 U		
Aroclor-1248	140 UJ	160 U	420 U	4200 U	80 U		
Aroclor-1254	120 J	160 J	420 U	4200 U	80 U		
Aroclor-1260	160 J	83 J	420 U	4200 U	56 J		

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET							
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON						
SDG NO: EABE5	EABF8DL	EABF9	EABF9DL	EABG1	EXQ92		
EPA SAMPLE NUMBER:							
REGIONAL SAMPLE NUMBER:							
SAMPLE LOCATION:							
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample		
MATRIX/ANALYSIS:	SOIL/ 20.0 17	SOIL/ 5.0 25	SOIL/ 50.0 25	SOIL/ 1.0 13	SOIL/ 2.0 24		
DILUTION FACTOR:							
PERCENT MOISTURE:							
PES							
alpha-BHC	41 U	11 U	110 U	2.0 U	4.5 U		
beta-BHC	41 U	11 U	110 U	2.0 U	4.5 U		
delta-BHC	41 U	11 U	110 U	0.38 J	4.5 U		
gamma-BHC (Lindane)	41 U	11 U	110 U	2.0 U	4.5 U		
Heptachlor	41 U	4.8 J	110 U	2.0 U	4.5 U		
Aldrin	41 U	11 U	110 U	2.0 U	4.5 U		
Heptachlor epoxide	41 U	190	190 D	0.22 J	5.7 J		
Endosulfan I	41 U	11 U	110 U	2.0 U	4.5 U		
Dieldrin	10 J	25	220 U	3.8 U	2.9 J		
4,4'-DDE	37 J	14 J	12 DJ	3.8 U	13 J		
Endrin	80 U	22 U	220 U	3.8 U	8.7 U		
Endosulfan II	80 U	22 U	220 U	3.8 U	8.7 U		
4,4'-DDD	80 U	8.6 J	220 U	3.8 U	8.7 U		
Endosulfan sulfate	3.4 J	22 U	220 U	3.8 U	10 J		
4,4'-DDT	59 J	30	23 DJ	3.8 U	36 J		
Methoxychlor	410 U	110 U	1100 U	20 U	45 U		
Endrin ketone	80 U	22 U	220 U	0.39 J	2.9 J		
Endrin aldehyde	80 U	22 U	220 U	3.8 U	8.7 U		
alpha-Chlordane	160	320	360 D	2.0 U	4.5 U		
gamma-Chlordane	86	110	160 D	2.0 U	2.7 J		
Toxaphene	4100 U	1100 U	11000 U	200 U	450 U		
Aroclor-1016	800 U	220 U	2200 U	38 U	87 U		
Aroclor-1221	1600 U	450 U	4500 U	77 U	180 U		
Aroclor-1232	800 U	220 U	2200 U	38 U	87 U		
Aroclor-1242	800 U	220 U	2200 U	38 U	87 U		
Aroclor-1248	800 U	220 U	2200 U	38 U	87 U		
Aroclor-1254	800 U	220 U	2200 U	38 U	87 U		
Aroclor-1260	800 U	220 U	2200 U	38 U	87 U		

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER:	EXQ93	EXQ94	EXQ95	EXQ96	EXQ97	
REGIONAL SAMPLE NUMBER:						
SAMPLE LOCATION:						
SAMPLE TYPE:	Routine Sample	Routine Sample	Routine Sample	Routine Sample	Routine Sample	
MATRIX/ANALYSIS:	SOIL/	SOIL/	SOIL/	SOIL/	SOIL/	
DILUTION FACTOR:	1.0	2.0	4.0	2.0	2.0	
PERCENT MOISTURE:	25	23	23	23	29	
PES						
alpha-BHC	2.3	U	4.4	U	8.8	U
beta-BHC	2.3	U	4.4	U	8.8	U
delta-BHC	2.3	U	4.4	U	8.8	U
gamma-BHC (Lindane)	2.3	U	4.4	U	8.8	U
Heptachlor	0.62	J	4.4	U	8.8	U
Aldrin	3.0		4.3	J	8.8	U
Heptachlor epoxide	8.1		5.7		24	J
Endosulfan I	2.3	U	4.4	U	8.8	U
Dieldrin	4.4	U	14		17	U
4,4'-DDE	11		29		17	J
Endrin	4.4	U	8.6	U	17	U
Endosulfan II	4.4	U	8.6	U	17	U
4,4'-DDD	1.5	J	3.3	J	2.1	J
Endosulfan sulfate	5.1		6.8	J	8.7	J
4,4'-DDT	18		53		28	J
Methoxychlor	23	U	44	U	88	U
Endrin ketone	2.1	J	8.6	U	4.7	J
ndrin aldehyde	4.4	U	8.6	U	17	U
lpha-Chlordane	2.3	U	3.1	J	8.8	U
gamma-Chlordane	2.3	U	2.4	J	8.8	U
Toxaphene	230	U	440	U	880	U
Aroclor-1016	44	U	86	U	170	U
Aroclor-1221	89	U	170	U	350	U
Aroclor-1232	44	U	86	U	170	U
Aroclor-1242	44	U	86	U	170	U
Aroclor-1248	44	U	86	U	170	U
Aroclor-1254	44	U	86	U	170	U
Aroclor-1260	44	U	86	U	170	U

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

LABORATORY: RECRA-MD
CASE #: 23525
SDG #: EABE5
SITE NAME: U.S. Steel Waukegan (IL)

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TCL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: EABE5	SITE: LABORATORY: RECRA ENVIRON					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT MOISTURE:	EXQ97MS	EXQ97MSD	EXQ98	EXQ99	PBLK1	
Matrix Spike SOIL/ 2.0 29	Matrix Spike Du SOIL/ 2.0 29	Routine Sample SOIL/ 1.0 12	Routine Sample SOIL/ 1.0 13	Method Blank SOIL/ 1.0		
PES						
alpha-BHC	4.8 U	4.8 U	1.9 U	2.0 U	1.7 U	
beta-BHC	4.8 U	4.8 U	1.9 U	2.0 U	1.7 U	
delta-BHC	4.8 U	4.8 U	1.9 U	2.0 U	1.7 U	
gamma-BHC (Lindane)	25	23	1.9 U	2.0 U	1.7 U	
Heptachlor	23	22	1.9 U	2.0 U	1.7 U	
Aldrin	29	27	1.9 U	2.0 U	1.7 U	
Heptachlor epoxide	5.1	9.9	1.9 U	0.33 J	1.7 U	
Endosulfan I	4.8 U	4.8 U	1.9 U	2.0 U	1.7 U	
Dieldrin	47	45	3.8 U	3.8 U	3.3 U	
4,4'-DDE	78	78	3.8 U	3.8 U	3.3 U	
Endrin	51	49	3.8 U	3.8 U	3.3 U	
Endosulfan II	9.3 U	9.3 U	3.8 U	3.8 U	3.3 U	
4,4'-DDD	3.0 J	3.0 J	3.8 U	3.8 U	3.3 U	
Endosulfan sulfate	9.3	12	3.8 U	3.8 U	3.3 U	
4,4'-DDT	150	140	3.8 U	3.8 U	3.3 U	
Methoxychlor	48 U	48 U	19 U	20 U	17 U	
Endrin ketone	3.2 J	3.5 J	3.8 U	3.8 U	3.3 U	
Endrin aldehyde	9.3 U	9.3 U	3.8 U	3.8 U	3.3 U	
alpha-Chlordane	2.5 J	2.5 J	1.9 U	2.0 U	1.7 U	
gamma-Chlordane	1.7 J	1.7 J	1.9 U	2.0 U	1.7 U	
Toxaphene	480 U	480 U	190 U	200 U	170 U	
Aroclor-1016	93 U	93 U	38 U	38 U	33 U	
Aroclor-1221	190 U	190 U	76 U	77 U	67 U	
Aroclor-1232	93 U	93 U	38 U	38 U	33 U	
Aroclor-1242	93 U	93 U	38 U	38 U	33 U	
Aroclor-1248	93 U	93 U	38 U	38 U	33 U	
Aroclor-1254	93 U	93 U	38 U	38 U	33 U	
Aroclor-1260	93 U	93 U	38 U	38 U	33 U	

FILENAME: EABE5.SDG DATE: 06/08/95 TIME: 13:42 CADRE 2.10

Water units are reported in ug/L.

Soil units are reported in ug/Kg.

Reviewed by: Krystyna Minczuk Lockheed/ESAT
Date: June 15th, 1995

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE:

SUBJECT: Review of Region V CLP Data
Received for Review on May 19, 1995

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: IEPA Patricia Scott ^{06/19/95} D Wesolowski

We have reviewed the data for the following case:

06/19/95

SITE NAME: U.S. Steel Waukegan (IL)

CASE NUMBER: 23525 SDG NUMBER: EABE5

Number and Type of Samples: 18 (Soil)

Sample Numbers: EABE5 - 7, FABF4-9, EABG1, EX092-99

Laboratory: RECRRA (MD) Hrs. for Review: 27 42

w/jw

Following are our findings:

The data are acceptable and usable with the qualifications described in the attached narrative.

DK

RECEIVED

JUN 28 1995

IEPA/DPLC

Patricia Scott

cc: Regional TPO

NARRATIVE

**CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)**

Below is a summary of the out-of-control audits and the possible effect on the data for this case:

This review covers eighteen soil samples (EABE5 through EABE7, EABF4 through EABF9, EABG1, and EXQ92 through EXQ99) for complete organic analysis at low levels. All samples were collected on either 5/3/95 or 5/4/95 and received by the lab on 5/5/95.

The reviewer's narrative and data qualifiers follow.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 30 May 1995

NARRATIVE

CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)

1. Holding Times:

All samples were analyzed for volatiles well within the fourteen day holding time from date of sampling for soil samples.

All samples analyzed were extracted for both semi-volatiles and pesticides/PCBs one day after receipt, thereby very easily meeting the fourteen day holding times for these fractions; all extracts were very promptly analyzed.

2. GC/MS Tuning and GC Instrument Performance:

The GC/MS tuning and mass calibration were all within the required Q.C. limits. All pesticide breakdown results were far below the maximum permissible limits. All pesticide resolution checks were at or very near the ideal 100%.

3. Calibration:

The calibration outliers for all fractions are listed on the outliers forms. All RPDs in the pesticide calibration verification summaries (Pest-1) were well below the maximum permissible 25%.

4. Method Blanks:

All four volatile method blanks were found to contain the common contaminant methylene chloride; all of the samples also contained this compound. Each of the four method blanks excepting VBLK54 also contained the common contaminant acetone; this compound was also found in most of the samples. VBLK52 also contained the common contaminant butanone, but neither of its two associated samples contained this compound. Each of the method blanks except for VBLK53 also contained a single TIC identified as "column bleed"; all of their respective samples also contained this TIC.

The semi-volatile method blank contained no target compound, but did contain two unknown TICs; all of the samples also contained both compounds except for EABE7DL, which contained only one.

The pesticide method blank contained no target analytes.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 30 May 1995

NARRATIVE

CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)

Target analytes and TICs found in both the sample and the associated method blank, and therefore flagged "B" by the lab, are further flagged "U" by the reviewer if the analytes are present in the sample at no more than five times (or ten times for common contaminants) the amount in the method blank. If the value is less than CRQL, it is deleted and raised to CRQL by the reviewer.

5. Surrogate Recoveries:

All volatile surrogate recoveries were within the Q.C. limits.

All semi-volatile surrogate recoveries were within the Q.C. limits except for the recoveries of terphenyl-d₄ in EABE7, EABE7RE, EABF4, EABF4RE, EABF5, EABF5RE, EABF9, EXQ92RE, EXQ93, EXQ93RE, EXQ94, EXQ94RE, EXQ95, EXQ95RE, EXQ96, EXQ96RE, EXQ97, EXQ97MS and EXQ97MSD; one outlier per sample is permitted for the semi-volatile fraction.

The recoveries of decachlorobiphenyl (DCB) on column 2 for samples EABE5DL and EABF9DL were zero, while both surrogate recoveries on both columns were zero for EABF7DL; since the corresponding surrogate recoveries in the initial analyses were satisfactory (or marginally above the upper limit in the case of DCB on column 1 for EABF7) no action is recommended on this basis. The recoveries of DCB on column 1 for samples EABE5, EABF5, EABF6, EABF7, EABF9DL, EXQ92, EXQ95 and EXQ96 were above the upper limit. Positive results for analytes in these samples should therefore be considered J, estimated, but non-detects need not be qualified.

6. Matrix Spikes and Matrix Spike Duplicates:

All volatile MS and MSD recoveries for both EXQ97MS and EXQ97MSD were below the lower limits and the RPDs for toluene and chlorobenzene were above the limits; since none of these compounds was present in the unspiked sample, the results for chlorobenzene, toluene, benzene, trichloroethene and 1,1-dichloroethene in EXQ97 should be considered UJ, estimated quantitation limits.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 30 May 1995

NARRATIVE

CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)

For the semi-volatile fraction, all RPDs were very satisfactory, but the recoveries of all matrix spike compounds except for N-nitroso-di-n-propylamine in EXQ97MSD and those for acenaphthene in both EXQ97MS and EXQ97MSD, were above the upper limits. Since pyrene was the only matrix spike compound present in the unspiked sample, the value for pyrene in EXQ97 should be considered J, estimated.

All pesticide MS and MSD recoveries were well within the Q.C. limits except those for DDT in both EXQ97MS and EXQ97MSD, which were slightly above the upper limits; all RPDs were satisfactory. Since DDT was present in the unspiked sample, the value for DDT in EXQ97 should be considered J, estimated.

7. Field Duplicates and Field Blanks:

No samples in this case were identified as field duplicates or field blanks.

8. Internal Standards Performance:

All volatile IS areas were within the Q.C. limits.

In the semi-volatile fraction, the IS areas for 1,4-dichlorobenzene- d_4 (IS#1), naphthalene- d_8 (IS#2), phenanthrene- d_{10} (IS#4), chrysene- d_{12} (IS#5) and perylene- d_{12} (IS#6) in sample EXQ92 were below the lower Q.C. limits; this sample was reanalyzed and only the areas for IS#5 and IS#6 remained below the limits. IS areas #5 and #6 were below the lower limits in samples EXQ95 and EXQ96, but upon reanalysis, only IS#6 remained below the lower limit. It is therefore recommended that the results from the reanalyzed samples EXQ92RE, EXQ95RE and EXQ96RE be used, but compounds quantitated on the internal standards (see attached Table 4) with areas below the Q.C. limits should be considered estimated, J or UJ, as above.

NARRATIVE

CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)

In samples EABE5, EABF7 and EABF8, the areas for IS#6 only were below the lower limits; upon reanalysis, the areas for both IS#5 and IS#6 were below the limits. The results from the initial analyses should therefore be used, but compounds quantitated on IS#6 should be considered estimated, J or UJ. The area for IS#6 was also below the limit for sample EXQ96DL, but none of the compounds quantitated on this standard are to be used.

Both IS areas #5 and #6 were below the lower limits for samples EABE7, EABF4, EABF5, EABF6, EABF9, EXQ93, EXQ94, and their corresponding reanalyses. The results from the initial analyses of these samples should therefore be used, but compounds quantitated on IS#5 and IS#6 in these samples should be considered estimated, J or UJ, as above.

In sample EXQ97, IS areas #4 and #5 were below the lower limits and IS#6 was less than 10%; this sample was not reanalyzed because it was used for MS and MSD analysis. The areas for IS#5 and IS#6 were below the limits in both EXQ97MS and EXQ97MSD. Compounds quantitated on IS#4 and IS#5 in EXQ97 should be considered estimated, J or UJ, while compounds quantitated on IS#6 should be considered J, estimated, for positive values or R, unusable, for non-detects.

9. Compound Identification:

The compound identifications for all fractions appear to be satisfactory.

10. Compound Quantitation and Reported Detection Limits:

The correct limits were used and the proper adjustments were made for percent moisture and dilutions.

11. System Performance:

All aspects of the system performance appear to be satisfactory.

Reviewed by: Al Venuto (Lockheed/ESAT)
Date: 30 May 1995

NARRATIVE

CASE: 23525
SDG# EABE5
LABORATORY: RECRA-MD
SITE: U.S. Steel Waukegan (IL)

12. Additional Case-Specific Problems:

The semi-volatile fractions of samples EABE7, EXQ95 and EXQ96 were reanalyzed at dilutions because the values for one or two compounds in each exceeded the calibration range. Only the values for those compounds which exceeded the calibration range in the affected samples should be taken from the corresponding diluted samples; for all other compounds, the results from the initial analyses should be used.

The pesticide fractions of samples EABE5, EABF7, EABF8 and EABF9 were reanalyzed at dilutions because the values for two or three analytes exceeded the calibration range. Only the values for those analytes which exceeded the calibration range in the affected samples should be taken from the corresponding diluted samples; for all other analytes the results from the initial analyses should be used.

CALIBRATION OUTLIERS VOLATILE TCL COMPOUNDS

Pg. 3 of 13

-ASE/SAS#: 23525
COLUMN: DB-624
HEATED PURGE (Y/N): Y

(Page 1 of 1)

LABORATORY: REC-RH - MD

SITE NAME: U.S. Steel - Nilesagon (IL)

Reviewer's Init/Date: AV 5-25-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

- = These flags should be applied to the analytes on the sample data sheets.
 - # = Minimum Relative Response Factor

CALIBRATION OUTLIERS
VOLATILE TCL COMPOUNDS

(Page 1 of 1)

Pg 9 of 13

USE/SAS#: 23525

COLUMN: DB-624

HEATED PURGE (Y/N): X

LABORATORY: RECRA - MP

SITE NAME: U.S. Steel-Waukegan (IL)

Instruments	Initial Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.										
Date/Time	5-10-95 / 11:35	5-11-95 11:59													
#	rf	%rsd	*	rf	%d	*	rf	%d	*	rf	%d	*	rf	%d	*
Chloromethane	0.01	9.29		0.668	28.11										
Bromomethane	0.10														
Vinyl chloride	0.10	1.138		1.836	26.51										
Chloroethane	0.01														
Methylene chloride	0.01	2.774	50.81	1.868	32.71										
Acetone	0.01														
Carbon disulfide	0.01														
1,1-Dichloroethene	0.10														
1,1-Dichloroethane	0.20														
1,2-Dichloroethene (total)															
Chloroform	0.20														
1,2-Dichloroethane	0.10														
2-Butanone	0.01														
1,1,1-Trichloroethane	0.10														
Carbon tetrachloride	0.10														
Bromodichloromethane	0.20														
1,2-Dichloropropane															
cis-1,3-Dichloropropene	0.20														
Trichloroethene	0.30														
Dibromochloromethane	0.10														
1,1,2-Trichloroethane	0.10														
benzene	0.50														
trans-1,3-Dichloropropene	0.10														
Bromoform	0.10														
4-Methyl-2-pentanone	0.01														
2-Hexanone	0.01														
Tetrachloroethene	0.20														
1,1,2,2-Tetrachloroethane	0.50														
Toluene	0.40														
Chlorobenzene	0.50														
Ethylbenzene	0.10														
Styrene	0.30														
Xylene (total)	0.30														
Toluene-d8															
Bromofluorobenzene	0.20														
1,2-Dichloroethane-d4															

Samples affected:

VLK52	VLK83
EABE5	
EXQ95	EABE6
EXQ96	EABE7
	EABF7
	EABG1
	EXQ92
	dm EXQ94
	EXQ97

Reviewer's Init/Date: AV 5-25-95

dm EXQ99

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= Minimum Relative Response Factor

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CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS

(Page 1 of 2)

CASE\SAS#: 23525

COLUMN: _____

LABORATORY: RECRA - MD
SITE NAME: H.B. Steel - Waukegan (IL)

Instrument	Initial Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.
Date/Time:	5-12-95	5-12-95 9:51	5-13-95 11:43	5-15-95 12:40	5-15-95 16:45	5-17-95 10:25
	#	rf	%rsd	*	rf	%d
Phenol	0.80					
bis(2-chloroethyl) Ether	0.70					
2-Chlorophenol	0.70					
1,3-Dichlorobenzene						
1,4-Dichlorobenzene						
1,2-Dichlorobenzene						
2-Methylphenol	0.70					
2,2'-Oxybis(1-chl-propane)	0.01					
4-Methylphenol	0.60					
N-nitroso-di-n-propylamine	0.50					
Hexachloroethane	0.30					
Nitrobenzene	0.20					
Isophorone	0.40					
2-Nitrophenol	0.10					
2,4-Dimethylphenol	0.20					
bis-(2-chloroethoxy)methane	0.30					
2,4-Dichlorophenol	0.20					
1,2,4-Trichlorobenzene	0.20					
Naphthalene	0.70					
4-Chloroaniline	0.01					
hexachlorobutadiene	0.01					
4-Chloro-3-methylphenol	0.20					
2-Methylnaphthalene	0.40					
Hexachlorocyclopentadiene	0.01	451		472		483
2,4,6-Trichlorophenol	0.20					
2,4,5-Trichlorophenol	0.20					
2-Chloronaphthalene	0.80					
2-Nitroaniline	0.01					
Dimethyl phthalate	0.01					
Acenaphthylene	1.30					
2,6-Dinitrotoluene	0.20					
3-Nitroaniline	0.01					
Acenaphthene	0.30					
2,4-Dinitrophenol	0.01					
4-Nitrophenol	0.01	172		159		182
Dibenzofuran	0.80					
2,4-Dinitrotoluene	0.20					

Affected samples:	SBLK1	SBLK1	EABE5RE	EABE7RE	EABE7DL
	EABE5	EABE5	EABE7	EABF4RE	EABF5
	EABE6	EABE6	EABF4	EABF9RE	EABF5RE
	EABF4	EABF6	EABF6RE	EXQ93RE	EXQ95RF
	EABF7	EABF7	EABF7RE	EXQ94RE	EXQ95 DL
	EABF8	EABF8	EABF8RE	EXQ95	EXQ96 RE
	EABG1	EABG1	EABF9	EXQ96	EXQ96 DL
	EXQ92	EXQ92	EXQ92RE	EXQ96MS	
	EXQ98	EXQ98	EXQ93	EXQ96MSD	

Reviewer's Init/Date: AV
5-25-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.

= Minimum Relative Response Factor

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CALIBRATION OUTLIER
SEMIVOLATILE TCL COMPOUNDS
(Page 2 of 2)

CASE\AS#:23525
COLUMN:

LABORATORY: RECRA-MD
SITE NAME: U.S. Steel - Waukegan (IL)

Instrument#	Initial Cal.	Contin. Cal.		Contin. Cal.		Contin. Cal.		Contin. Cal.		Contin. Cal.		Contin. Cal.			
		#	rf	%rad	*	rf	%d	*	rf	%d	*	rf	%d		
Diethylphthalate	0.01														
4-Chlorophenyl-phenylether	0.40														
Fluorene	0.90														
4-Nitroaniline	0.01														
4,6-Dinitro-2-methylphenol	0.01														
N-nitrosodiphenylamine	0.01														
4-Bromophenyl-phenylether	0.10														
Hexachlorobenzene	0.10														
Pentachlorophenol	0.05														
Phenanthrene	0.70														
Anthracene	0.70														
Carbazole															
Di-n-butylphthalate	0.01														
Fluoranthene	0.60														
Pyrene	0.60														
Butylbenzylphthalate	0.01														
3,3'-Dichlorobenzidine	0.01, 295				230			1,411	39.3	J	326		1,419	42.0	J
Benzo(a)anthracene	0.80														
Chrysene	0.70														
is(2-Ethylhexyl)phthalate	0.01														
Di-n-octyl phthalate	0.01														
Benzo(b)fluoranthene	0.70														
Benzo(k)fluoranthene	0.70														
Benzo(a)pyrene	0.70														
Indeno(1,2,3-cd)pyrene	0.50, 8581				1.923			1,761		1,165	35.81	J	1,939		
Dibenz(a,h)anthracene	0.40														
Benzo(g,h,i)perylene	0.50, 701				1.767			1.626		1.950	35.5	J	1,773		
Nitrobenzene-d5	0.01														
2-Fluorobiphenyl	0.70														
Terphenyl-d14	0.50														
Phenol-d5	0.80														
2-Fluorophenol	0.60														
2,4,6-Tribromophenol	0.01														
2-Chlorophenol-d4															
1,2-Dichlorobenzene-d4															

Reviewer's Init/Date: AV 5-25-95

J/R = All positive results are estimated "J" and non-detected results are unusable "R"

* = These flags should be applied to the analytes on the sample data sheets.

= Minimum Relative Response Factor

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**CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS**
(Page 1 of 1)

CASE/SAS#: 23525

LABORATORY: RECRA - MP

COLUMN: RTX-5

SITE NAME: U.S. Steel - Waukegan (IL)

Instrument#	GC-32	Initial Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.	Contin. Cal.
Date/Time:	4-23-95	14-23-95 17:25 5/12-95	23:46 5/14-95	23:33			
		#	if	%rd	*	if	%rd
alpha-BHC	0.01						
beta-BHC	0.40						
delta-BHC	0.90						
gamma-BHC	0.01						
Heptachlor	0.01						
Aldrin	0.01						
Heptachlor epoxide	0.10						
Endosulfan I	0.10						
Dieldrin	0.05						
4, 4'-DDE	0.70						
Endrin	0.70						
Endosulfan II	0.01						
4, 4'-DDD	0.60						
Endosulfan sulfate	0.60						
4, 4'-DDT	0.01						
Methoxychlor	0.01	20.8	J				
Endrin ketone	0.80						
Endrin aldehyde	0.70						
alpha chlordane	0.01						
gamma chlordane	0.01						
Arochlor 1016							
Arochlor 1221							
Arochlor 1232							
Arochlor 1242							
Arochlor 1248							
Arochlor 1254							
Arochlor 1260							

Affected samples:

PBLK
EABE5
EABE5DL
EABF7
EABF7DL
EABF8DL
EABF9
EABF9DL
EABG1
EXQ98
EXQ99
EABEG
EABE7
EABF4
EABF5

Reviewer's Init/Date: AV
5-26-95

EABF6
EABF8
EXQ92 thru EXQ97
EXQ97MS and EXQ97MSD

* These flags should be applied to the analytes on the sample data sheets.
Minimum Relative Response Factor

**CALIBRATION OUTLIER
PESTICIDE/PCB TCL COMPOUNDS**
(Page 1 of 1)

CASE/SASH: 23525COLUMN: RTX-35LABORATORY: RECRA - MDSITE NAME: 118, Steel-Waukegan (IL)

Instrument#	Initial Cal.	Contin. Cal.											
Date/Time:	4-27-95	14:23:45	17:25:51	14:45:23	15:14:52	13:33							
	#	rf	%rd	*	rf	%d	*	rf	%d	*	rf	%d	*
alpha-BHC	0.01												
beta-BHC	0.40												
delta-BHC	0.90												
gamma-BHC	0.01												
Heptachlor	0.01												
Aldrin	0.01												
Heptachlor epoxide	0.10												
Endosulfan I	0.10												
Dieldrin	0.05												
4, 4'-DDE	0.70												
Endrin	0.70												
Endosulfan II	0.01												
4, 4'-DDD	0.60												
Endosulfan sulfate	0.60												
4, 4'-DDT	0.01												
Methoxychlor	0.01												
Endrin ketone	0.80												
Endrin aldehyde	0.70												
alpha chlordane	0.01												
gamma chlordane	0.01												
Arochlor 1016													
Arochlor 1221													
Arochlor 1232													
Arochlor 1242													
Arochlor 1248													
Arochlor 1254													
Arochlor 1260													

Affected samples:

PBLK1
EABE5
EABE5DL
EABF7
EABF7DL
EABP8DL
EABFG
EABFGDL
EABG1
EXQ98
EXQ99
EABEG
EABEZ
EABF4
EABFS
EABP6
EABP8

Reviewer's Init/Date: AV
5-26-95EXQ92 stat EXQ97
EXQ97 MS & MSD

* These flags should be applied to the analytes on the sample data sheets.
 # Minimum Relative Response Factor

TABLE 4
(For Multi-Media, Multi-Concentration Analysis)

VOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

<u>Bromoform</u>	<u>1,4-Difluorobenzene</u>	<u>Chlorobenzene-d₅</u>
Chloromethane		2-Hexanone
Bromomethane		4-Methyl-2-pentanone
Vinyl chloride		Tetrachloroethene
Chloroethane		1,1,2,2-Tetrachloroethane
Methylene chloride		Toluene
Acetone		Chlorobenzene
Carbon disulfide		Ethylibenzene
1,1-Dichloroethene		Styrene
1,1-Dichloroethane		Xylene(total)
1,2-Dichloroethene(total)		Bromoethenobenzene(surr,smc)
Chloroform		Toluene-d ₆ (surr,smc)
1,2-Dichloroethene		
1,2-Dichloroethane-d ₄ (surr,smc)		
2-Butanone		

SEMI-VOLATILE INTERNAL STANDARDS WITH CORRESPONDING TCL ANALYTES ASSIGNED FOR QUANTITATION

<u>1,4-Dichlorobenzene-d₅</u>	<u>Naphthalene-d₈</u>	<u>Acenaphthene-d₁₀</u>	<u>Phenanthrene-d₁₀</u>	<u>Chrysene-d₁₂</u>	<u>Chrysene-d₁₂</u>	<u>Perylene-d₁₂</u>
Phenol bis(2-chloroethyl)ether	Naphthalene	Hexachlorocyclopentadiene	4,6-Dinitro-2-methylphenol	Pyrene	Pyrene	Di-n-octyl phthalate
2-Chlorophenol	Isophorone	2,4,6-Trichlorophenol	N-nitroso-d ₁ -phenylamine	butylbenzyl phthalate	butylbenzyl phthalate	Benzol(b)fluoranthene
1,3-Dichlorobenzene	2-Nitrophenol	2,4,5-Trichlorophenol	Carbazole	3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	Benzol(k)fluoranthene
1,4-Dichlorobenzene	2,4-Dimethylphenol	2-Chloronaphthalene	4-Bromophenyl phenyl ether	Benzol(e)anthracene	Benzol(e)anthracene	Benzol(j)pyrene
2,2'-Oxybis-(1-chloropropane)	Naphthalene	2-Nitronaphthalene	Hexachlorobenzene	Indeno[1,2,3-cd]pyrene	Indeno[1,2,3-cd]pyrene	Dibenz(o,h)anthracene
1,2-Dichlorobenzene	2,4-Dichlorophenol	bis(2-Chlorothoxy)methane	Pentachlorophenol	Chrysene	Chrysene	Benzol(g,h,i)perylene
2-Methylphenol	1,2,4-Trichlorobenzene	2,4-Dichlorophenol	Phenanthrene	Terphenyl-d ₁₄ (surr)	Terphenyl-d ₁₄ (surr)	
bis(2-Chloroisopropyl)ether	4-Chloraniline	1,2,4-Trichlorobenzene	Anthracene			
4-Methylphenol	Hexachlorobutadiene	4-Chloraniline	Di-n-butyl phthalate			
N-nitroso-di-n-propylamine	4-Chloro-3-methylphenol	4-Chlorophenol	Fluorene			
Hexachloroethane	2-Methylnaphthalene	4-Nitrophenol				
2-Fluorophenol(surr)	Nitrobenzene-d ₄ (surr)	Dibenzo(furan)				
Phenol-d ₄ (surr)		2,4-Dinitrotoluene				
2-Chlorobenzene-d ₅ (surr)		2,6-Dinitrotoluene				
1,2-Dichlorobenzene-d ₄ (surr)		Diethyl phthalate				
		4-Chlorophenyl phenyl ether				
		Fluorene				
		4-Nitroaniline				
		2-Fluorobiphenyl(surr)				
		2,4,6-Tribromophenol(surr)				

(surr) - surrogate
(smc) - system monitoring compound

OLM01.1 (3/90)
ESAT-4-27.1

ORGANIC DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utilized in this document, the following code letters and associated definitions are provided:

VALUE-if the results is a value greater than or equal to the Contract Required Quantitation Limit (CRQL).

- U** Indicates that the compound was analyzed for, but not detected. The sample quantitation limit corrected for dilution and percent moisture is reported.
- J** Indicates an estimated value. This flag is used either when estimating a concentration for a tentatively identified compound or when the data indicates the presence of a compound but the result is less than the sample quantitation limit, but greater than zero. The flag is also used to indicate a reported result having an associated QC problem.
- R** Indicates the data are unusable. (Note: The analyte may or may not be present.)
- N** Indicates presumptive evidence of a compound. This flag is only used for a tentatively identified compound, where the identification is based on a mass spectral library search.
- P** Indicates a pesticide/Aroclor target analyte when there is greater than 25% difference for the detected concentrations between the two GC columns. The lower of the two results is reported.
- C** Indicates pesticide results that have been confirmed by GC/MS.
- B** Indicates the analyte is detected in the associated blank as well as the sample.
- E** Indicates compounds whose concentrations exceed the calibration range of the instrument.
- D** Indicates an identified compound in an analysis has been diluted. This flag alerts the data user to any differences between the concentrations reported in the two analysis.
- A** Indicates tentatively identified compounds that are suspected to be aldol condensation products.
- G** Indicates the TCLP Matrix Spike Recovery was greater than the upper limit of the analytical method.
- L** Indicates the TCLP Matrix Spike Recovery was less than the lower limit of the analytical method.
- T** Indicates the analyte is found in the associated TCLP extraction blank as well as in the sample.
- X, Y, Z** are reserved for laboratory defined flags.



United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

1. Matrix (Enter in Column A)		2. Preservative (Enter in Column D)		3. Sampler Signature		4. Date Shipped Carrier		5. Airbill Number		6. Date Received -- Received by:		
1. Surface Water	1. HCl	1. Region No.	1. Sampling Co.	1. 5/14/95	1. ABC	1. 5/15/95	1. ABC	1. 68050000	1. ABC	1. 5/15/95	1. ABC	
2. Ground Water	2. HNO ₃	2. Sampler (Name)	2. Sampler (Name)	2. 5/14/95	2. ABC	2. 5/15/95	2. ABC	2. 68050000	2. ABC	2. 5/15/95	2. ABC	
3. Leachate	3. NaHSO ₄	3. Early Action	3. CLEM	3. 5/14/95	3. ABC	3. 5/15/95	3. ABC	3. 68050000	3. ABC	3. 5/15/95	3. ABC	
4. Field QC	4. H ₂ SO ₄	4. Purpose*	4. PA	4. 5/14/95	4. ABC	4. 5/15/95	4. ABC	4. 68050000	4. ABC	4. 5/15/95	4. ABC	
5. Soil/Sediment	5. Ice only	5. REM	5. RD	5. 5/14/95	5. ABC	5. 5/15/95	5. ABC	5. 68050000	5. ABC	5. 5/15/95	5. ABC	
6. Other	6. Other (Specify in Column D)	6. RI	6. RA	6. 5/14/95	6. ABC	6. 5/15/95	6. ABC	6. 68050000	6. ABC	6. 5/15/95	6. ABC	
7. Waste	(High only)	7. SI	7. O&M	7. 5/14/95	7. ABC	7. 5/15/95	7. ABC	7. 68050000	7. ABC	7. 5/15/95	7. ABC	
8. Other (Specify in Column A)	N. Not preserved	8. ESI	8. NPLD	8. 5/14/95	8. ABC	8. 5/15/95	8. ABC	8. 68050000	8. ABC	8. 5/15/95	8. ABC	
CLP Sample Numbers (from labels)		A	B	C	D	E	F	G	H	I	K	
		Matrix (from Box 1)	Conc. Low	Sample Type, Comp / Grab	Preservative (from Box 2)	RAS Analysis	Regional Specific Tracking Number or Tag Numbers	Station Location Identifier	Mo/Day/ Year/Time Sample Collection	Corresponding CLP Inorganic Sample No.	Sampler Initials	High Phases
		Other:	Med	Other:	VOA	BN	P	TOX	ARO	High only	Solids	Water, Lq. Miscible, Lq. Wastes
			High	Other:								
1. X6 94		5	1	1	X	X	5-513410-11	X115	5/4/95 1520 1122 14	KU		
2. X6 94		5	1	1	X	X	5-112112	X115	5/4/95 1320 1122 14	KU		
3. X6 94		5	1	1	X	X	5-113113-64	X211	5/3/95 1235 0120 15	KU		
4. X6 94		5	1	1	X	X	5-114114	X111	5/3/95 1235 0120 15	KU		
5. X6 94		5	1	1	X	X	5-013410-47	X212	5/3/95 1235 0120 15	KU		
6. X6 94		5	1	1	X	X	5-013198	X212	5/3/95 1235 0120 15	KU		
7. X6 94		5	1	1	X	X	5-013099-344	X213	5/3/95 1235 0120 15	KU		
8. X6 94		5	1	1	X	X	5-113201	X213	5/3/95 1145 0120 15	KU		
Shipment for Case Complete? (Y/N)		Page of	Sample(s) to be Used for Laboratory QC		Chain of Custody Record		Additional Sampler Signatures		Chain of Custody Seal Number(s)			
1		1	1		1		1		1			

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<i>John Lake 11</i>	3/4/95 14:00	<i>John Lake 11</i>	<i>John Lake 11</i>	3/4/95 14:00	<i>John Lake 11</i>
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Remarks	Is custody seal intact? (Y/n)
<i>ERAS 5</i>					
<i>ABC</i>	5/5/95 11:15	<i>ABC</i>	5/5/95 11:15	No temp. blank, no intact	

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*SEE REVERSE FOR PURPOSE CODE DEFINITIONS

EPA Form 9110-2
REV. 3/93

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353918



United States Environmental Protection Agency
Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

										SAS No. (if applicable)		Case No.			
1. Matrix (Enter in Column A)		2. Region No.		Sampling Co.		4. Date Shipped		Carrier		6. Date Received --Received by.					
1. Surface Water 2. Ground Water 3. Leachate 4. Field QC 5. Soil/Sediment 6. Oil (High only) 7. Waste (High only) 8. Other (Specify in Column A)		5/4/15		5/4/15		201505810		AB Cautus		5/5/95		AB Cautus			
1. HCl 2. HNO3 3. NaHSO4 4. H2SO4 5. Ice only 6. Other (Specify in Column D)		6. Purpose: Early Action		7. Long-Term Action:		5. Ship To: Region Enviro Inc., 111 Park, (310) 414-1111, Suite F, Williamson, MD ATTN: [REDACTED] [REDACTED]		7. Transfer to: Received by		6 P.D. - 05/0		Laboratory Contract Number			
N. Not preserved		Lead SF PRP ST FED		PA REM RI SI		8. Other (Specify in Column A)		Contract Number		Price		Unit Price			
CLP Sample Numbers (from labels)		A Matrix (from Box 1) Other:		B Conc.: Low Med High		C Sample Type: Comp / Grab		D Preser- vative (from Box 2) Other:		E RAS Analysis PC High only PC ARO TOX		F Regional Specific Tracking Number or Tag Numbers		G Station Location Identifier	
CLP Sample Numbers (from labels)		5		5		5		5		5		5/103163-14		H Mo/Day/ Year/Time Collection	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103115		I Corresponding CLP Inorganic Sample No.	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103116-107		J Sampler Initials	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103118		K High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103119-110		L Water Miscible Liq Immis.	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103120-111		M Solids	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103121-112		N Wet Solids	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103122-113		O High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103123-114		P High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103124-115		Q High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103125-116		R High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103126-117		S High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103127-118		T High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103128-119		U High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103129-120		V High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103130-121		W High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103131-122		X High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103132-123		Y High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103133-124		Z High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103134-125		AA High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103135-126		BB High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103136-127		CC High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103137-128		DD High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103138-129		EE High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103139-130		FF High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103140-131		GG High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103141-132		HH High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103142-133		II High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103143-134		JJ High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103144-135		KK High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103145-136		LL High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103146-137		MM High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103147-138		NN High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103148-139		OO High Phases	
CLP Sample Numbers (from labels)		5		5		5		5		5		5-103149-140		PP High Phases	
Shipment for Case Complete? (Y/N)		Page 2 of 2		Sample(s) to be Used for Laboratory QC		Additional Sampler Signatures		Chain of Custody Seal Number(s)							
Relinquished by: (Signature)		Date / Time 5/4/15 140		Received by: (Signature)		Relinquished by: (Signature)		Date / Time 5/5/15 140		Received by: (Signature)		Date / Time 5/5/15 140		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Remarks Is custody seal intact? (Y/N/none)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received by Laboratory by: (Signature)		Relinquished by: (Signature)		Date / Time		5/5/15 140		5/5/15 140		5/5/15 140	



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2480

O^{rganic} Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

1. Sample Description (Enter in Column A)	2. Preservative (Enter in Column D)	3. Region No.	Sampling Co.	5. Date Shipped	Carrier	7. Date Received - Received by AB CANTON	SAS No. (if applicable)	Case No.				
1. Surface Water	1. HCl	1	1	1	1	5/5/95	5/5/95					
2. Ground Water	2. HNO ₃	1	1	1	1	6/25-010	Laboratory Contract Number	Unit Price				
3. Leachate	3. NaHSO ₄											
4. Rinsate	4. H ₂ SO ₄											
5. Soil/Sediment	5. Other											
6. Oil (High only)	6. Oil (High only) (Specify)											
7. Waste (High only)	7. Waste (High only) (Specify)											
8. Other	8. Other (Specify)											
CLP Sample Numbers (from labels)	A Enter # From Box 1	B Conc. Low	C Conc. Mid	D Conc. High	E RAS Analysis	F Regional Specific Tracking Number or Tag Numbers	G Station Location Number	H Mo/Day/ Year/Time Sample Collection	I Sampler Initials	J Corresp. CLP Inorg. Samp. No.	K Sam- ple Condition on Rec'd	L High Conc. Phases (Check Below)
111314	5	✓	✓	✓	X	5-11348-49	1111	5/4/95 1320	ME 2222	OK		
111314	5	✓	✓	✓	X	5-11348-50	1111	5/4/95 1320	ME 2223			
111315	5	✓	✓	✓	✓	5-11351-51	1112	5/5/95 1320	ME 2224			
111315	5	✓	✓	✓	✓	5-11351-52	1112	5/5/95 1320	ME 2224			
111315	5	✓	✓	✓	✓	5-11353	1113	5/5/95 1320	ME 2224			
111314	5	✓	✓	✓	✓	5-11354-53	1113	5/5/95 1320	ME 2225			
111314	5	✓	✓	✓	✓	5-11351-54	1113	5/5/95 1320	ME 2225			
111317	5	✓	✓	✓	✓	5-11351-55	1114	5/5/95 1320	ME 2226			
111317	5	✓	✓	✓	✓	5-11351-56	1114	5/5/95 1320	ME 2226			
111317	5	✓	✓	✓	✓	5-11351-57	1114	5/5/95 1320	ME 2226			
111317	5	✓	✓	✓	✓	5-11351-58	1114	5/5/95 1320	ME 2226			
111318	5	✓	✓	✓	✓	5-11351-59	1115	5/5/95 1320	ME 2227			
111318	5	✓	✓	✓	✓	5-11351-60	1115	5/5/95 1320	ME 2227			
Shipment for Case complete? (Y/N)	Page 1 of 2	Additional Sampler Signatures										Chain of Custody Seal Number 11525741558

Relinquished by: (Signature) EA BEC	Date / Time 5/4/95 1100	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) AB CANTON	Date / Time	Remarks Is custody seal intact? ON/none	Date / Time
Split Samples	<input type="checkbox"/> Accepted	<input type="checkbox"/> Declined	Signature	Signature	Signature

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United States Environmental Protection Agency
Contract Laboratory Program

ganic Traffic Report & Chain of Custody Record

(For Organic CLP Analysis)

1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)	2. Region No	Sampling Co.	4. Date Shipped	Carrier	5. Ship To	6. Date Received	Received by:
1. Surface Water	1. HCl							
2. Ground Water	2. HNO ₃							
3. Leachate	3. NaHSO ₄							
4. Field QC	4. H ₂ SO ₄							
5. Soil/Sediment	5. Ice only							
6. Oil (High only)	6. Other (Specify in Column D)							
7. Waste (High only)	N. Not preserved							
8. Other (Specify in Column A)								
CLP Sample Numbers (from labels)	A	B	C	D	E	F	G	H
Matrix (from Box 1) Other:	Conc..	Sample Type: Low Med High	Preser- vative Comp/ Grab	RAS Analysis	Regional Specific Tracking Number or Tag Numbers	Station Location Identifier	Mo/Day/ Year/Time Sample Collection	Corresponding CLP Inorganic Sample No.
EX-112	S	L	9	X	5-A034115-76	X112	4/4/1050	ME2D50
EX-112	S	L	6	X	5-A034117	X112	4/4/1050	ME2D50
EX-113	S	L	9	X	5-A034118-79	X111	4/4/1035	ME2D51
EX-113	S	L	6	X	5-A034180	X111	5/4/1035	ME2D51
EX-114	S	L	6	X	5-A034181-82	X112	5/4/1040	ME2D52
EX-114	S	L	6	X	5-A03483	X112	5/4/1040	ME2D52
EX-115	S	L	6	X	5-A03484-85	X113	5/4/1045	ME2D52
EX-115	S	L	6	X	5-A03486	X113	5/4/1045	ME2D52
EX-116	S	L	6	X	5-A03487-88	X111	5/4/1045	ME2D53
EX-116	S	L	6	X	5-A03489	X114	5/4/1045	ME2D53
Shipment for Case Complete? (Y/N)	Page 1 of 2				Sample(s) to be Used for Laboratory QC	Additional Sampler Signatures	Chain of Custody Seal Number(s)	45259/45260

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<i>John L.</i>	5/4/95 14:00				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
			<i>BBB5</i>		
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? (Y/N)
		<i>ABCarts</i>			

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<i>John L.</i>	5/4/95 14:00				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
			<i>BBB5</i>		
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact? (Y/N)
		<i>ABCarts</i>			

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EPA Form 9110-2
42-0124 REV 393

358914

ANALYTICAL RESULTS

Prepared For

The United States Environmental Protection Agency

Region V

536 S Clark Street
Tenth Floor, 5SCLL
Chicago, Illinois 60605

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MAY 19 1985

Prepared By

Recra Environmental, Inc.
8320 Guilford Road, Building F
Columbia, Maryland 21046

US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

METHODOLOGY

The specific methodology employed in obtaining the enclosed analytical result is indicated on the specific data table. The method numbers presented refer to the following U.S. Environmental Protection Agency reference.

- * U.S. Environmental Protection Agency 8/94 Organic Statement of Work, OLMO3.1.

COMMENTS

Comments pertain to data on all pages of this report.

It is RECRA Environmental's policy to report positive identifications to a level of approximately ten percent of CRQL.

The Volatile sample pH data has been reported in tabular format and is located directly behind the GC Column Summary portion of the Case Narrative.

The protocol required Alkane summaries are reported in tabular format, listed by retention time in minutes, and are located directly behind the Volatile sample pH data, directly preceding the Fraction Notes portion of the Case Narrative.

GCMS quantitation reports for both samples and standards contained within this sample data package often require manual integration of the areas of the quantitation ion for select constituents. When such manual integration is required, the quantitation report for said constituents are flagged with an "M". The need for manual integration includes, but is not necessarily limited to, the autoquantitation program's failure to integrate peaks of interest or the failure to correctly integrate said peaks due to poor geometry, peak tailing or peak resolution. Manual edits of Form 1 data, if performed, are flagged with an "X" qualifier.



RECRA
ENVIRONMENTAL
INC.

000001

CASE/SDG: 23525 EABE5

SAMPLE INFORMATION: EABE5
EABE6
~~EABE7~~ EABF4
EABF5
EABF6 *AV*
5-22-95
EABF7
EABF8
EABF9
EABG1
EXQ92
EXQ93
EXQ94
EXQ95
EXQ96
EXQ97
EXQ97MS
EXQ97MSD
EXQ98
EXQ99

RECEIVED

MAY 19 1995

US EPA CENTRAL REGIONAL LAB.
536 S. CLARK ST.
CHICAGO, ILLINOIS 60605

Recra Environmental, Inc. of Columbia, Maryland received the above referenced samples from the USEPA on May 05, 1995. This sample delivery group contains 18 soils for Organic analyses. These analyses were performed according to instructions in the IFB document for this contract.

VOLATILE DATA

Samples EXQ97MS, and EXQ97MSD exhibited decreased recoveries of 1,1-Dichloroethene, Trichloroethene, Benzene, Toluene, and Chlorobenzene. In addition, the relative percent differences for Toluene and Chlorobenzene were outside of criteria limits.

The Volatile Holding Blank for this group of samples was not started upon receipt of this sample delivery group due to an error. The holding Blank used, was started with an SDG which was received one day prior to this group of samples. It should be noted that both SDGs were stored in the same sample cooler under the same storage conditions.

There were no other deviations from protocol observed during these analyses.



RECRA
ENVIRONMENTAL
INC.

000033

SEMIVOLATILE DATA

Samples EABE5, EABE7, EABF4, EABF5, EABF6, EABF7, EABF8, EABF9, EXQ92, EXQ93, EXQ94, EXQ95, and EXQ96 required reanalysis due to poor recoveries of internal standard compounds. All reanalyses of these samples confirmed a possible matrix effect. Therefore, the reanalyses are billable.

Samples EABE7, EXQ95, and EXQ96 required dilutions due to high responses of target compounds which exceeded the initial calibration range. Therefore, the dilutions of these samples is billable.

Samples EXQ97MS and EXQ97MSD exhibited increased recoveries of Phenol, 2-Chlorophenol, 1,4-Dichlorobenzene, N-Nitrosodi-n-propylamine, 1,2,4-Trichlorobenzene, 4-Chloro-3-methylphenol, 4-Nitrophenol, 2,4-Dinitrotoluene, Pentachlorophenol, and Pyrene. A possible matrix effect may have occurred as all relative percent differences were within criteria limits. It should also be noted that samples EXQ97, EAX97MS, AND EXQ97MSD exhibited poor recoveries of internal standard compounds. This may also be an indication of a possible matrix effect.

PESTICIDE/PCB DATA

Samples EABE5, EABF7, EABF8, and EABF9 required dilutions due to high concentrations of target compounds which exceeded the initial calibration range. The dilutions of these samples are billable. It should that the surrogates in these samples, with the exception of sample EABF8 were diluted out.

Samples EABE5, EABF5, EABF6, EABF7, EXQ92, EXQ95, and EXQ96 exhibited recoveries of the surrogate Decachlorobiphenyl which exceeded criteria limits.

Samples EXQ97MS, and EXQ97MSD exhibited increased recoveries for the spiking compound 4,4'-DDT. The relative percent differences between the two samples were within criteria limits for all spiking compounds.

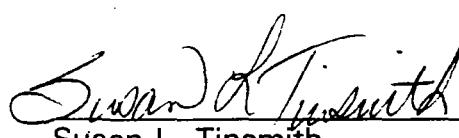
It should be noted that samples EABE6, EABE7, EABF4, EABF5, EABF6, and EABF8 contained Aroclor patterns. Several peaks within these Aroclor patterns were also within the retention time windows of several Pesticide compounds on both chromatographic columns and were positively identified as such.

Please accept the Pesticide forms VI H, I, and J(resolution forms). Although the statement of work requires both analytical columns to be reported on a single form, the software currently utilized is incapable of producing the forms in this format. The resolution for each analytical column has been reported in chronological order. Please note that the laboratory is working closely with its vendor to resolve this problem.

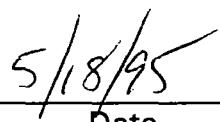


There were no other deviations from protocol observed during these analyses.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and the computer-readable data submitted on diskette has been authorized by the Laboratory Manager, or his designee, as verified by the following signature.



Susan L. Tinsmith
Laboratory Manager



Date



RECRA
ENVIRONMENTAL
INC.

000035

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

L Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	EABE5	106	99	105	0	0
02	EABE6	107	100	102	0	0
03	EABE7	104	103	109	0	0
04	EABF4	101	100	98	0	0
05	EABF5	101	103	98	0	0
06	EABF6	113	101	102	0	0
07	EABF7	108	99	105	0	0
08	EABF8	102	112	105	0	0
09	EABF9	101	99	105	0	0
10	EABG1	104	107	109	0	0
11	EXQ92	105	101	109	0	0
12	EXQ93	108	101	110	0	0
13	EXQ94	108	105	110	0	0
14	EXQ95	88	87	94	0	0
15	EXQ96	87	87	97	0	0
16	EXQ97	108	96	108	0	0
17	EXQ98	104	106	107	0	0
18	EXQ99	103	104	106	0	0
19	EXQ97MS	110	93	97	0	0
20	EXQ97MSD	103	98	102	0	0
21	VBLK53	98	99	95	0	0
22	VBLK52	84	88	90	0	0
23	VBLK83	101	101	101	0	0
24	VBLK54	102	102	100	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)

SMC2 (BFB) = Bromofluorobenzene (59-113)

SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

L. Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix Spike - EPA Sample No.: EXQ97

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene_____	70.40	0	29.35	42 *	59-172
Trichloroethene_____	70.40	0	22.01	31 *	62-137
Benzene_____	70.40	0	26.22	37 *	66-142
Toluene_____	70.40	0	25.41	36 *	59-139
Chlorobenzene_____	70.40	0	18.59	26 *	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene_____	70.40	30.03	43 *	2	22	59-172
Trichloroethene_____	70.40	18.72	27 *	14	24	62-137
Benzene_____	70.40	20.82	30 *	21	21	66-142
Toluene_____	70.40	17.84	25 *	36 *	21	59-139
Chlorobenzene_____	70.40	12.23	17 *	42 *	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 2 out of 5 outside limits

Spike Recovery: 10 out of 10 outside limits

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

VBLK53

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Lab File ID: AR087

Lab Sample ID: BM001406

Date Analyzed: 05/10/95

Time Analyzed: 1237

GC Column: DB-624

ID: 0.530 (mm)

Heated Purge: (Y/N) Y

Instrument ID: 70011

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EABF4	B5012601	AR095	1817
02	EABF5	B5012602	AR096	1846
03	EABF6	B5012603	AR097	1915
04	EABF8	B5012605	AR099	2013

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

VBLK52

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Lab File ID: FP837

Lab Sample ID: BM001412

Date Analyzed: 05/10/95

Time Analyzed: 1624

GC Column: DB-624 ID: 0.530 (mm)

Heated Purge: (Y/N) Y

Instrument ID: 70055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EXQ95	B5012613	FP842	1918
02	EXQ96	B5012614	FP843	1949

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

VBLK83

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Lab File ID: FP853

Lab Sample ID: BM001407

Date Analyzed: 05/11/95

Time Analyzed: 1253

GC Column: DB-624 ID: 0.530 (mm)

Heated Purge: (Y/N) Y

Instrument ID: 70055

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EABE5	B5012607	FP861	1831
02	EABE6	B5012608	FP862	1901
03	EABE7	B5012609	FP863	1931
04	EABF7	B5012604	FP859	1730
05	EABG1	B5012618	FP867	2133
06	EXQ92	B5012610	FP868	2203
07	EXQ93	B5012611	FP869	2234
08	EXQ94	B5012612	FP870	2304
09	EXQ97	B5012615	FP864	2001
10	EXQ98	B5012616	FP865	2032
11	EXQ99	B5012617	FP866	2102

COMMENTS:

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

VBLK54

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABES

Lab File ID: AR109 Lab Sample ID: BM001411

Date Analyzed: 05/12/95 Time Analyzed: 1046

GC Column: DB-624 ID: 0.530 (mm) Heated Purge: (Y/N) Y

Instrument ID: 70011

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EABF9	B5012606	AR113	1328
02	EXQ97MS	B5012615MS	AR111	1229
03	EXQ97MSD	B5012615SD	AR112	1258

COMMENTS:

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name:	RECRA ENVIRON	Contract:	68D50010	VBLK53		
Lab Code:	RECMD	Case No.:	23525	SAS No.:	SDG No.:	EABE5
Matrix:	(soil/water) SOIL			Lab Sample ID:	BM001406	
Sample wt/vol:	5.0 (g/mL) G			Lab File ID:	AR087	
Level:	(low/med) LOW			Date Received:		
% Moisture:	not dec.			Date Analyzed:	05/10/95	
GC Column:	DB-624	ID:	0.530 (mm)	Dilution Factor:	1.0	
Soil Extract Volume:		(uL)		Soil Aliquot Volume:	(uL)	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG			Q
		10	U	8	
74-87-3-----	Chloromethane				
74-83-9-----	Bromomethane				
75-01-4-----	Vinyl Chloride				
75-00-3-----	Chloroethane				
75-09-2-----	Methylene Chloride				
67-64-1-----	Acetone				
75-15-0-----	Carbon Disulfide				
75-35-4-----	1,1-Dichloroethene				
75-34-3-----	1,1-Dichloroethane				
540-59-0-----	1,2-Dichloroethene (total)				
67-66-3-----	Chloroform				
107-06-2-----	1,2-Dichloroethane				
78-93-3-----	2-Butanone				
71-55-6-----	1,1,1-Trichloroethane				
56-23-5-----	Carbon Tetrachloride				
75-27-4-----	Bromodichloromethane				
78-87-5-----	1,2-Dichloropropane				
10061-02-6-----	cis-1,3-Dichloropropene				
79-01-6-----	Trichloroethene				
124-48-1-----	Dibromochloromethane				
79-00-5-----	1,1,2-Trichloroethane				
71-43-2-----	Benzene				
10061-01-5-----	trans-1,3-Dichloropropene				
75-25-2-----	Bromoform				
108-10-1-----	4-Methyl-2-Pentanone				
591-78-6-----	2-Hexanone				
127-18-4-----	Tetrachloroethene				
79-34-5-----	1,1,2,2-Tetrachloroethane				
108-88-3-----	Toluene				
108-90-7-----	Chlorobenzene				
100-41-4-----	Ethylbenzene				
100-42-5-----	Styrene				
1330-20-7-----	Xylene (total)				

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

L Name: RECRA ENVIRON	Contract: 68D50010	VBLK53
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: BM001406
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: AR087
Level: (low/med)	LOW	Date Received:
% Moisture: not dec.		Date Analyzed: 05/10/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)
Number TICs found:	0	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK52

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: BM001412

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP837

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	10	U	
74-83-9-----	Bromomethane	10	U	
75-01-4-----	Vinyl Chloride	10	U	
75-00-3-----	Chloroethane	10	U	
75-09-2-----	Methylene Chloride	8	J	
67-64-1-----	Acetone	9	J	
75-15-0-----	Carbon Disulfide	10	U	
75-35-4-----	1,1-Dichloroethene	10	U	
75-34-3-----	1,1-Dichloroethane	10	U	
540-59-0-----	1,2-Dichloroethene (total)	10	U	
67-66-3-----	Chloroform	10	U	
107-06-2-----	1,2-Dichloroethane	10	U	
78-93-3-----	2-Butanone	2	J	
71-55-6-----	1,1,1-Trichloroethane	10	U	
56-23-5-----	Carbon Tetrachloride	10	U	
75-27-4-----	Bromodichloromethane	10	U	
78-87-5-----	1,2-Dichloropropane	10	U	
10061-02-6-----	cis-1,3-Dichloropropene	10	U	
79-01-6-----	Trichloroethene	10	U	
124-48-1-----	Dibromochloromethane	10	U	
79-00-5-----	1,1,2-Trichloroethane	10	U	
71-43-2-----	Benzene	10	U	
10061-01-5-----	trans-1,3-Dichloropropene	10	U	
75-25-2-----	Bromoform	10	U	
108-10-1-----	4-Methyl-2-Pentanone	10	U	
591-78-6-----	2-Hexanone	10	U	
127-18-4-----	Tetrachloroethene	10	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U	
108-88-3-----	Toluene	10	U	
108-90-7-----	Chlorobenzene	10	U	
100-41-4-----	Ethylbenzene	10	U	
100-42-5-----	Styrene	10	U	
1330-20-7-----	Xylene (total)	10	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK52

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: BM001412
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP837
Level: (low/med)	LOW	Date Received:
% Moisture: not dec.		Date Analyzed: 05/10/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: Number TICs found: 1 (ug/L or ug/Kg) UG/KG		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.70	15	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK83

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: BM001407

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP853

Level: (low/med) LOW

Date Received:

% Moisture: not dec.

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	10	U	
74-83-9-----	Bromomethane	10	U	
75-01-4-----	Vinyl Chloride	10	U	
75-00-3-----	Chloroethane	10	U	
75-09-2-----	Methylene Chloride	9	J	
67-64-1-----	Acetone	7	J	
75-15-0-----	Carbon Disulfide	10	U	
75-35-4-----	1,1-Dichloroethene	10	U	
75-34-3-----	1,1-Dichloroethane	10	U	
540-59-0-----	1,2-Dichloroethene (total)	10	U	
67-66-3-----	Chloroform	10	U	
107-06-2-----	1,2-Dichloroethane	10	U	
78-93-3-----	2-Butanone	10	U	
71-55-6-----	1,1,1-Trichloroethane	10	U	
56-23-5-----	Carbon Tetrachloride	10	U	
75-27-4-----	Bromodichloromethane	10	U	
78-87-5-----	1,2-Dichloropropane	10	U	
10061-02-6-----	cis-1,3-Dichloropropene	10	U	
79-01-6-----	Trichloroethene	10	U	
124-48-1-----	Dibromochloromethane	10	U	
79-00-5-----	1,1,2-Trichloroethane	10	U	
71-43-2-----	Benzene	10	U	
10061-01-5-----	trans-1,3-Dichloropropene	10	U	
75-25-2-----	Bromoform	10	U	
108-10-1-----	4-Methyl-2-Pentanone	10	U	
591-78-6-----	2-Hexanone	10	U	
127-18-4-----	Tetrachloroethene	10	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U	
108-88-3-----	Toluene	10	U	
108-90-7-----	Chlorobenzene	10	U	
100-41-4-----	Ethylbenzene	10	U	
100-42-5-----	Styrene	10	U	
1330-20-7-----	Xylene (total)	10	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK83

L. Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: BM001407
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP853
Level: (low/med)	LOW	Date Received:
% Moisture: not dec.		Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)
CONCENTRATION UNITS: Number TICs found: 1 (ug/L or ug/Kg) UG/KG		

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.72	11	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK54

Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	
Matrix: (soil/water) SOIL	Lab Sample ID: BM001411		
Sample wt/vol: 5.0 (g/mL) G	Lab File ID: AR109		
Level: (low/med) LOW	Date Received:		
% Moisture: not dec.	Date Analyzed: 05/12/95		
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0	
Soil Extract Volume: (uL)	Soil Aliquot Volume: (uL)		
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3-----	Chloromethane	10	U
74-83-9-----	Bromomethane	10	U
75-01-4-----	Vinyl Chloride	10	U
75-00-3-----	Chloroethane	10	U
75-09-2-----	Methylene Chloride	13	
67-64-1-----	Acetone	10	U
75-15-0-----	Carbon Disulfide	10	U
75-35-4-----	1,1-Dichloroethene	10	U
75-34-3-----	1,1-Dichloroethane	10	U
540-59-0-----	1,2-Dichloroethene (total)	10	U
67-66-3-----	Chloroform	10	U
107-06-2-----	1,2-Dichloroethane	10	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	10	U
56-23-5-----	Carbon Tetrachloride	10	U
75-27-4-----	Bromodichloromethane	10	U
78-87-5-----	1,2-Dichloropropane	10	U
10061-02-6-----	cis-1,3-Dichloropropene	10	U
79-01-6-----	Trichloroethene	10	U
124-48-1-----	Dibromochloromethane	10	U
79-00-5-----	1,1,2-Trichloroethane	10	U
71-43-2-----	Benzene	10	U
10061-01-5-----	trans-1,3-Dichloropropene	10	U
75-25-2-----	Bromoform	10	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	10	U
79-34-5-----	1,1,2,2-Tetrachloroethane	10	U
108-88-3-----	Toluene	10	U
108-90-7-----	Chlorobenzene	10	U
100-41-4-----	Ethylbenzene	10	U
100-42-5-----	Styrene	10	U
1330-20-7-----	Xylene (total)	10	U

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK54

Lab Name:	RECRA ENVIRON	Contract:	68D50010	
Lab Code:	RECMD	Case No.:	23525	SAS No.:
Matrix:	(soil/water) SOIL			Lab Sample ID:
Sample wt/vol:	5.0 (g/mL) G			Lab File ID:
Level:	(low/med) LOW			Date Received:
% Moisture:	not dec.			Date Analyzed:
GC Column:	DB-624	ID:	0.530 (mm)	Dilution Factor:
Soil Extract Volume:		(uL)		Soil Aliquot Volume:
CONCENTRATION UNITS: Number TICs found: 1 (ug/L or ug/Kg) UG/KG				
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.65	6	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name: RECRA ENVIRON		Contract: 68D50010	EABE5	
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5	
Matrix: (soil/water) SOIL		Lab Sample ID: B5012607		
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP861		
Level: (low/med)	LOW	Date Received: 05/05/95		
% Moisture: not dec.	20	Date Analyzed: 05/11/95		
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0		
Soil Extract Volume: (uL)		Soil Aliquot Volume: (uL)		
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q		
		12	U	
74-87-3-----Chloromethane				
74-83-9-----Bromomethane	12	U		
75-01-4-----Vinyl Chloride	12	U		
75-00-3-----Chloroethane	12	U		
75-09-2-----Methylene Chloride	22	B _L		
67-64-1-----Acetone	12	X	BJXL	AV
75-15-0-----Carbon Disulfide	12	U		
75-35-4-----1,1-Dichloroethene	12	U		
75-34-3-----1,1-Dichloroethane	12	U		
540-59-0-----1,2-Dichloroethene (total)	12	U		
67-66-3-----Chloroform	12	U		
107-06-2-----1,2-Dichloroethane	12	U		
78-93-3-----2-Butanone	12	U		
71-55-6-----1,1,1-Trichloroethane	12	U		
56-23-5-----Carbon Tetrachloride	12	U		
75-27-4-----Bromodichloromethane	12	U		
78-87-5-----1,2-Dichloropropane	12	U		
10061-02-6-----cis-1,3-Dichloropropene	12	U		
79-01-6-----Trichloroethene	12	U		
124-48-1-----Dibromochloromethane	12	U		
79-00-5-----1,1,2-Trichloroethane	12	U		
71-43-2-----Benzene	12	U		
10061-01-5-----trans-1,3-Dichloropropene	12	U		
75-25-2-----Bromoform	12	U		
108-10-1-----4-Methyl-2-Pentanone	12	U		
591-78-6-----2-Hexanone	12	U		
127-18-4-----Tetrachloroethene	12	U		
79-34-5-----1,1,2,2-Tetrachloroethane	12	U		
108-88-3-----Toluene	12	U		
108-90-7-----Chlorobenzene	12	U		
100-41-4-----Ethylbenzene	12	U		
100-42-5-----Styrene	12	U		
1330-20-7-----Xylene (total)	12	U		

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L Name: RECRA ENVIRON	Contract: 68D50010	EABE5
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012607
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP861
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	20	Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.73	19	BJV

AV

5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE6

L. Name:	RECRA ENVIRON	Contract:	68D50010		
Lab Code:	RECMD	Case No.:	23525		
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012608		
Sample wt/vol:	5.0 (g/mL) G	Lab File ID:	FP862		
Level:	(low/med) LOW	Date Received:	05/05/95		
% Moisture:	not dec. 23	Date Analyzed:	05/11/95		
GC Column:	DB-624	ID:	0.530 (mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)	Soil Aliquot Volume:		(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
74-87-3-----	Chloromethane	13	U	
74-83-9-----	Bromomethane	13	U	
75-01-4-----	Vinyl Chloride	13	U	
75-00-3-----	Chloroethane	13	U	
75-09-2-----	Methylene Chloride	24	BV	
67-64-1-----	Acetone	13	U	
75-15-0-----	Carbon Disulfide	13	U	
75-35-4-----	1,1-Dichloroethene	13	U	
75-34-3-----	1,1-Dichloroethane	13	U	
540-59-0-----	1,2-Dichloroethene (total)	13	U	
67-66-3-----	Chloroform	13	U	
107-06-2-----	1,2-Dichloroethane	13	U	
78-93-3-----	2-Butanone	13	U	
71-55-6-----	1,1,1-Trichloroethane	13	U	
56-23-5-----	Carbon Tetrachloride	13	U	
75-27-4-----	Bromodichloromethane	13	U	
78-87-5-----	1,2-Dichloropropane	13	U	
10061-02-6-----	cis-1,3-Dichloropropene	13	U	
79-01-6-----	Trichloroethene	13	U	
124-48-1-----	Dibromochloromethane	13	U	
79-00-5-----	1,1,2-Trichloroethane	13	U	
71-43-2-----	Benzene	13	U	
10061-01-5-----	trans-1,3-Dichloropropene	13	U	
75-25-2-----	Bromoform	13	U	
108-10-1-----	4-Methyl-2-Pentanone	13	U	
591-78-6-----	2-Hexanone	13	U	
127-18-4-----	Tetrachloroethene	13	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----	Toluene	13	U	
108-90-7-----	Chlorobenzene	13	U	
100-41-4-----	Ethylbenzene	13	U	
100-42-5-----	Styrene	13	U	
1330-20-7-----	Xylene (total)	13	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	RECRA ENVIRON	Contract:	68D50010	EABE6			
Lab Code:	RECMD	Case No.:	23525	SAS No.:	SDG No.:	EABE5	
Matrix: (soil/water) SOIL			Lab Sample ID: B5012608				
Sample wt/vol:			5.0 (g/mL)	G	Lab File ID:	FP862	
Level: (low/med)			LOW	Date Received:			05/05/95
% Moisture: not dec.			23	Date Analyzed:			05/11/95
GC Column: DB-624			ID: 0.530 (mm)	Dilution Factor:			1.0
Soil Extract Volume:			(uL)	Soil Aliquot Volume:			(uL)
Number TICs found: 2				CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG			

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	11.66	7	J
2.	UNKNOWN COLUMN BLEED	15.69	16	BJ

AV
5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name:	RECRA ENVIRON	Contract:	68D50010		
Lab Code:	RECMD	Case No.:	23525		
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012609		
Sample wt/vol:	5.0 (g/mL) G	Lab File ID:	FP863		
Level:	(low/med) LOW	Date Received:	05/05/95		
% Moisture:	not dec. 13	Date Analyzed:	05/11/95		
GC Column:	DB-624	ID:	0.530 (mm)	Dilution Factor:	1.0
Soil Extract Volume:		(uL)	Soil Aliquot Volume:		(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/Kg)	UG/KG	
74-87-3-----	Chloromethane	11	U	
74-83-9-----	Bromomethane	11	U	
75-01-4-----	Vinyl Chloride	11	U	
75-00-3-----	Chloroethane	11	U	
75-09-2-----	Methylene Chloride	18	BL	
67-64-1-----	Acetone	11	U	
75-15-0-----	Carbon Disulfide	11	U	
75-35-4-----	1,1-Dichloroethene	11	U	
75-34-3-----	1,1-Dichloroethane	11	U	
540-59-0-----	1,2-Dichloroethene (total)	11	U	
67-66-3-----	Chloroform	11	U	
107-06-2-----	1,2-Dichloroethane	11	U	
78-93-3-----	2-Butanone	11	U	
71-55-6-----	1,1,1-Trichloroethane	11	U	
56-23-5-----	Carbon Tetrachloride	11	U	
75-27-4-----	Bromodichloromethane	11	U	
78-87-5-----	1,2-Dichloropropane	11	U	
10061-02-6-----	cis-1,3-Dichloropropene	11	U	
79-01-6-----	Trichloroethene	11	U	
124-48-1-----	Dibromochloromethane	11	U	
79-00-5-----	1,1,2-Trichloroethane	11	U	
71-43-2-----	Benzene	11	U	
10061-01-5-----	trans-1,3-Dichloropropene	11	U	
75-25-2-----	Bromoform	11	U	
108-10-1-----	4-Methyl-2-Pentanone	11	U	
591-78-6-----	2-Hexanone	11	U	
127-18-4-----	Tetrachloroethene	11	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U	
108-88-3-----	Toluene	11	U	
108-90-7-----	Chlorobenzene	11	U	
100-41-4-----	Ethylbenzene	11	U	
100-42-5-----	Styrene	11	U	
1330-20-7-----	Xylene (total)	11	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON	Contract: 68D50010	EABE7
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012609
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP863
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	13	Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	11.69	7	J
2.	UNKNOWN COLUMN BLEED	15.72	22	BJU

AV
5/24/95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF4

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012601

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: AR095

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 28

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	14	U	
74-83-9-----Bromomethane	14	U	
75-01-4-----Vinyl Chloride	14	U	
75-00-3-----Chloroethane	14	U	
75-09-2-----Methylene Chloride	14	U	
67-64-1-----Acetone	14	U	
75-15-0-----Carbon Disulfide	14	U	
75-35-4-----1,1-Dichloroethene	14	U	
75-34-3-----1,1-Dichloroethane	14	U	
540-59-0-----1,2-Dichloroethene (total)	14	U	
67-66-3-----Chloroform	14	U	
107-06-2-----1,2-Dichloroethane	14	U	
78-93-3-----2-Butanone	14	U	
71-55-6-----1,1,1-Trichloroethane	14	U	
56-23-5-----Carbon Tetrachloride	14	U	
75-27-4-----Bromodichloromethane	14	U	
78-87-5-----1,2-Dichloropropane	14	U	
10061-02-6-----cis-1,3-Dichloropropene	14	U	
79-01-6-----Trichloroethene	14	U	
124-48-1-----Dibromochloromethane	14	U	
79-00-5-----1,1,2-Trichloroethane	14	U	
71-43-2-----Benzene	14	U	
10061-01-5-----trans-1,3-Dichloropropene	14	U	
75-25-2-----Bromoform	14	U	
108-10-1-----4-Methyl-2-Pentanone	14	U	
591-78-6-----2-Hexanone	14	U	
127-18-4-----Tetrachloroethene	14	U	
79-34-5-----1,1,2,2-Tetrachloroethane	14	U	
108-88-3-----Toluene	14	U	
108-90-7-----Chlorobenzene	14	U	
100-41-4-----Ethylbenzene	14	U	
100-42-5-----Styrene	14	U	
1330-20-7-----Xylene (total)	14	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L.	Name: RECRA ENVIRON	Contract: 68D50010	EABF4
Lab Code:	RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix:	(soil/water) SOIL	Lab Sample ID: B5012601	
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: AR095	
Level:	(low/med) LOW	Date Received: 05/05/95	
% Moisture:	not dec. 28	Date Analyzed: 05/10/95	
GC Column:	DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)		Soil Aliquot Volume: (uL)
Number TICs found: 0		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EABF5

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012602

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: AR096

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 9

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl Chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene Chloride	15	BJV
67-64-1-----	Acetone	11	BJV
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-02-6-----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-01-5-----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-Pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-88-3-----	Toluene	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EABF5

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012602

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AR096

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 9 Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L . Name: RECRA ENVIRON

Contract: 68D50010

EABF6

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012603

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: AR097

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 18

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
74-87-3-----	Chloromethane	12	U	
74-83-9-----	Bromomethane	12	U	
75-01-4-----	Vinyl Chloride	12	U	
75-00-3-----	Chloroethane	12	U	
75-09-2-----	Methylene Chloride	22	BU	
67-64-1-----	Acetone	12	U	
75-15-0-----	Carbon Disulfide	12	U	
75-35-4-----	1,1-Dichloroethene	12	U	
75-34-3-----	1,1-Dichloroethane	12	U	
540-59-0-----	1,2-Dichloroethene (total)	12	U	
67-66-3-----	Chloroform	12	U	
107-06-2-----	1,2-Dichloroethane	12	U	
78-93-3-----	2-Butanone	12	U	
71-55-6-----	1,1,1-Trichloroethane	12	U	
56-23-5-----	Carbon Tetrachloride	12	U	
75-27-4-----	Bromodichloromethane	12	U	
78-87-5-----	1,2-Dichloropropane	12	U	
10061-02-6-----	cis-1,3-Dichloropropene	12	U	
79-01-6-----	Trichloroethene	12	U	
124-48-1-----	Dibromochloromethane	12	U	
79-00-5-----	1,1,2-Trichloroethane	12	U	
71-43-2-----	Benzene	12	U	
10061-01-5-----	trans-1,3-Dichloropropene	12	U	
75-25-2-----	Bromoform	12	U	
108-10-1-----	4-Methyl-2-Pentanone	12	U	
591-78-6-----	2-Hexanone	12	U	
127-18-4-----	Tetrachloroethene	12	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	12	U	
108-88-3-----	Toluene	12	U	
108-90-7-----	Chlorobenzene	12	U	
100-41-4-----	Ethylbenzene	12	U	
100-42-5-----	Styrene	12	U	
1330-20-7-----	Xylene (total)	12	U	

AV

5-24-79

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	RECRA ENVIRON	Contract:	68D50010	EABF6
Lab Code:	RECMD	Case No.:	23525	SAS No.:
Matrix:	(soil/water) SOIL			Lab Sample ID:
Sample wt/vol:	5.0 (g/mL) G			Lab File ID:
Level:	(low/med) LOW			Date Received:
% Moisture:	not dec.	18		Date Analyzed:
GC Column:	DB-624	ID:	0.530 (mm)	Dilution Factor:
Soil Extract Volume:		(uL)		Soil Aliquot Volume:
Number TICs found:		0	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7

Lc Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012604
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP859
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	22	Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	13	U	
74-83-9-----Bromomethane	13	U	
75-01-4-----Vinyl Chloride	13	U	
75-00-3-----Chloroethane	13	U	
75-09-2-----Methylene Chloride	15	BV	
67-64-1-----Acetone	13	BJV	AV
75-15-0-----Carbon Disulfide	13	U	
75-35-4-----1,1-Dichloroethene	13	U	
75-34-3-----1,1-Dichloroethane	13	U	
540-59-0-----1,2-Dichloroethene (total)	13	U	
67-66-3-----Chloroform	13	U	
107-06-2-----1,2-Dichloroethane	13	U	
78-93-3-----2-Butanone	13	U	
71-55-6-----1,1,1-Trichloroethane	13	U	
56-23-5-----Carbon Tetrachloride	13	U	
75-27-4-----Bromodichloromethane	13	U	
78-87-5-----1,2-Dichloropropane	13	U	
10061-02-6-----cis-1,3-Dichloropropene	13	U	
79-01-6-----Trichloroethene	13	U	
124-48-1-----Dibromochloromethane	13	U	
79-00-5-----1,1,2-Trichloroethane	13	U	
71-43-2-----Benzene	13	U	
10061-01-5-----trans-1,3-Dichloropropene	13	U	
75-25-2-----Bromoform	13	U	
108-10-1-----4-Methyl-2-Pentanone	13	U	
591-78-6-----2-Hexanone	13	U	
127-18-4-----Tetrachloroethene	13	U	
79-34-5-----1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----Toluene	13	U	
108-90-7-----Chlorobenzene	13	U	
100-41-4-----Ethylbenzene	13	U	
100-42-5-----Styrene	13	U	
1330-20-7-----Xylene (total)	13	U	

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L. Name: RECRA ENVIRON	Contract: 68D50010	EABF7	
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012604
Sample wt/vol:	5.0 (g/mL) G	Lab File ID:	FP859
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture: not dec.	22	Date Analyzed:	05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor:	1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume:	(uL)
Number TICs found: 1		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.69	14	BJU

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5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8

La Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012605

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: AR099

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 17

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	12	U	
74-83-9-----	Bromomethane	12	U	
75-01-4-----	Vinyl Chloride	12	U	
75-00-3-----	Chloroethane	12	U	
75-09-2-----	Methylene Chloride	12	U	
67-64-1-----	Acetone	12	U	
75-15-0-----	Carbon Disulfide	12	U	
75-35-4-----	1,1-Dichloroethene	12	U	
75-34-3-----	1,1-Dichloroethane	12	U	
540-59-0-----	1,2-Dichloroethene (total)	12	U	
67-66-3-----	Chloroform	12	U	
107-06-2-----	1,2-Dichloroethane	12	U	
78-93-3-----	2-Butanone	12	U	
71-55-6-----	1,1,1-Trichloroethane	12	U	
56-23-5-----	Carbon Tetrachloride	12	U	
75-27-4-----	Bromodichloromethane	12	U	
78-87-5-----	1,2-Dichloropropane	12	U	
10061-02-6-----	cis-1,3-Dichloropropene	12	U	
79-01-6-----	Trichloroethene	12	U	
124-48-1-----	Dibromochloromethane	12	U	
79-00-5-----	1,1,2-Trichloroethane	12	U	
71-43-2-----	Benzene	12	U	
10061-01-5-----	trans-1,3-Dichloropropene	12	U	
75-25-2-----	Bromoform	12	U	
108-10-1-----	4-Methyl-2-Pentanone	12	U	
591-78-6-----	2-Hexanone	12	U	
127-18-4-----	Tetrachloroethene	12	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	12	U	
108-88-3-----	Toluene	12	U	
108-90-7-----	Chlorobenzene	12	U	
100-41-4-----	Ethylbenzene	12	U	
100-42-5-----	Styrene	12	U	
1330-20-7-----	Xylene (total)	12	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF8

L. Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012605
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: AR099
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	17	Date Analyzed: 05/10/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)
Number TICs found: 0		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name: RECRA ENVIRON

Contract: 68D50010

EABF9

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012606

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: AR113

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 25

Date Analyzed: 05/12/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	13	U	
74-83-9-----	Bromomethane	13	U	
75-01-4-----	Vinyl Chloride	13	U	
75-00-3-----	Chloroethane	13	U	
75-09-2-----	Methylene Chloride	17	B <u>U</u>	
67-64-1-----	Acetone	13	U	
75-15-0-----	Carbon Disulfide	13	U	
75-35-4-----	1,1-Dichloroethene	13	U	
75-34-3-----	1,1-Dichloroethane	13	U	
540-59-0-----	1,2-Dichloroethene (total)	13	U	
67-66-3-----	Chloroform	13	U	
107-06-2-----	1,2-Dichloroethane	13	U	
78-93-3-----	2-Butanone	13	U	
71-55-6-----	1,1,1-Trichloroethane	13	U	
56-23-5-----	Carbon Tetrachloride	13	U	
75-27-4-----	Bromodichloromethane	13	U	
78-87-5-----	1,2-Dichloropropane	13	U	
10061-02-6-----	cis-1,3-Dichloropropene	13	U	
79-01-6-----	Trichloroethene	13	U	
124-48-1-----	Dibromochloromethane	13	U	
79-00-5-----	1,1,2-Trichloroethane	13	U	
71-43-2-----	Benzene	13	U	
10061-01-5-----	trans-1,3-Dichloropropene	13	U	
75-25-2-----	Bromoform	13	U	
108-10-1-----	4-Methyl-2-Pentanone	13	U	
591-78-6-----	2-Hexanone	13	U	
127-18-4-----	Tetrachloroethene	13	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----	Toluene	13	U	
108-90-7-----	Chlorobenzene	13	U	
100-41-4-----	Ethylbenzene	13	U	
100-42-5-----	Styrene	13	U	
1330-20-7-----	Xylene (total)	13	U	

AV

5-24-9

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF9

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012606

Sample wt/vol: 5.0 (g/mL) G Lab File ID: AR113

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 25 Date Analyzed: 05/12/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

Number TICs found: 2 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.65	10	BJV
2.	UNKNOWN COLUMN BLEED	18.96	7	J

AV
5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABG1

I Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012618
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP867
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	13	Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl Chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene Chloride	22	BV
67-64-1-----	Acetone	11	BJX C
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-02-6-----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-01-5-----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-Pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-88-3-----	Toluene	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABG1

I Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012618
Sample wt/vol:	5.0 (g/mL) G	Lab File ID: FP867
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture: not dec.	13	Date Analyzed: 05/11/95
GC Column: DB-624	ID: 0.530 (mm)	Dilution Factor: 1.0
Soil Extract Volume:	(uL)	Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.71	34	BJ✓

AV
5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ92

La Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012610

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP868

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 24

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume:

(uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	13	U	
74-83-9-----Bromomethane	13	U	
75-01-4-----Vinyl Chloride	13	U	
75-00-3-----Chloroethane	13	U	
75-09-2-----Methylene Chloride	16	B	
67-64-1-----Acetone	13	U	
75-15-0-----Carbon Disulfide	13	U	
75-35-4-----1,1-Dichloroethene	13	U	
75-34-3-----1,1-Dichloroethane	13	U	
540-59-0-----1,2-Dichloroethene (total)	13	U	
67-66-3-----Chloroform	13	U	
107-06-2-----1,2-Dichloroethane	13	U	
78-93-3-----2-Butanone	13	U	
71-55-6-----1,1,1-Trichloroethane	13	U	
56-23-5-----Carbon Tetrachloride	13	U	
75-27-4-----Bromodichloromethane	13	U	
78-87-5-----1,2-Dichloropropane	13	U	
10061-02-6-----cis-1,3-Dichloropropene	13	U	
79-01-6-----Trichloroethene	13	U	
124-48-1-----Dibromochloromethane	13	U	
79-00-5-----1,1,2-Trichloroethane	13	U	
71-43-2-----Benzene	13	U	
10061-01-5-----trans-1,3-Dichloropropene	13	U	
75-25-2-----Bromoform	13	U	
108-10-1-----4-Methyl-2-Pentanone	13	U	
591-78-6-----2-Hexanone	13	U	
127-18-4-----Tetrachloroethene	13	U	
79-34-5-----1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----Toluene	13	U	
108-90-7-----Chlorobenzene	13	U	
100-41-4-----Ethylbenzene	13	U	
100-42-5-----Styrene	13	U	
1330-20-7-----Xylene (total)	13	U	

AV
5-24-95

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ92

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012610

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FP868

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 24 Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.71	11	BJ/J

AV
 5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93

Lc Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012611

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP869

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 25

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	13	U	
74-83-9-----	Bromomethane	13	U	
75-01-4-----	Vinyl Chloride	13	U	
75-00-3-----	Chloroethane	13	U	
75-09-2-----	Methylene Chloride	13	BJ↓	
67-64-1-----	Acetone	13	U	81
75-15-0-----	Carbon Disulfide	13	U	
75-35-4-----	1,1-Dichloroethene	13	U	
75-34-3-----	1,1-Dichloroethane	13	U	
540-59-0-----	1,2-Dichloroethene (total)	13	U	
67-66-3-----	Chloroform	13	U	
107-06-2-----	1,2-Dichloroethane	13	U	
78-93-3-----	2-Butanone	13	U	
71-55-6-----	1,1,1-Trichloroethane	13	U	
56-23-5-----	Carbon Tetrachloride	13	U	
75-27-4-----	Bromodichloromethane	13	U	
78-87-5-----	1,2-Dichloropropane	13	U	
10061-02-6-----	cis-1,3-Dichloropropene	13	U	
79-01-6-----	Trichloroethene	13	U	
124-48-1-----	Dibromochloromethane	13	U	
79-00-5-----	1,1,2-Trichloroethane	13	U	
71-43-2-----	Benzene	13	U	
10061-01-5-----	trans-1,3-Dichloropropene	13	U	
75-25-2-----	Bromoform	13	U	
108-10-1-----	4-Methyl-2-Pentanone	13	U	
591-78-6-----	2-Hexanone	13	U	
127-18-4-----	Tetrachloroethene	13	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----	Toluene	13	U	
108-90-7-----	Chlorobenzene	13	U	
100-41-4-----	Ethylbenzene	13	U	
100-42-5-----	Styrene	13	U	
1330-20-7-----	Xylene (total)	13	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ94

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012612

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP870

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 23

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.71	11	BJL

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 5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95

Lab. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP842

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 23

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	13	U
74-83-9-----Bromomethane	13	U
75-01-4-----Vinyl Chloride	13	U
75-00-3-----Chloroethane	13	U
75-09-2-----Methylene Chloride	13	BJL
67-64-1-----Acetone	13	U
75-15-0-----Carbon Disulfide	13	U
75-35-4-----1,1-Dichloroethene	13	U
75-34-3-----1,1-Dichloroethane	13	U
540-59-0-----1,2-Dichloroethene (total)	13	U
67-66-3-----Chloroform	13	U
107-06-2-----1,2-Dichloroethane	13	U
78-93-3-----2-Butanone	13	U
71-55-6-----1,1,1-Trichloroethane	13	U
56-23-5-----Carbon Tetrachloride	13	U
75-27-4-----Bromodichloromethane	13	U
78-87-5-----1,2-Dichloropropane	13	U
10061-02-6-----cis-1,3-Dichloropropene	13	U
79-01-6-----Trichloroethene	13	U
124-48-1-----Dibromochloromethane	13	U
79-00-5-----1,1,2-Trichloroethane	13	U
71-43-2-----Benzene	13	U
10061-01-5-----trans-1,3-Dichloropropene	13	U
75-25-2-----Bromoform	13	U
108-10-1-----4-Methyl-2-Pentanone	13	U
591-78-6-----2-Hexanone	13	U
127-18-4-----Tetrachloroethene	13	U
79-34-5-----1,1,2,2-Tetrachloroethane	13	U
108-88-3-----Toluene	13	U
108-90-7-----Chlorobenzene	13	U
100-41-4-----Ethylbenzene	13	U
100-42-5-----Styrene	13	U
1330-20-7-----Xylene (total)	13	U

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ95

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012613

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FP842

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 23 Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.70	22	BJV

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 5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ96

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012614

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP843

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 23

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

CAS NO. COMPOUND

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	13	U	
74-83-9-----Bromomethane	13	U	
75-01-4-----Vinyl Chloride	13	U	
75-00-3-----Chloroethane	13	U	
75-09-2-----Methylene Chloride	13	TO BJV	
67-64-1-----Acetone	13	JK BJV	
75-15-0-----Carbon Disulfide	13	U	
75-35-4-----1,1-Dichloroethene	13	U	
75-34-3-----1,1-Dichloroethane	13	U	
540-59-0-----1,2-Dichloroethene (total)	13	U	
67-66-3-----Chloroform	13	U	
107-06-2-----1,2-Dichloroethane	13	U	
78-93-3-----2-Butanone	13	U	
71-55-6-----1,1,1-Trichloroethane	13	U	
56-23-5-----Carbon Tetrachloride	13	U	
75-27-4-----Bromodichloromethane	13	U	
78-87-5-----1,2-Dichloroproppane	13	U	
10061-02-6-----cis-1,3-Dichloropropene	13	U	
79-01-6-----Trichloroethene	13	U	
124-48-1-----Dibromochloromethane	13	U	
79-00-5-----1,1,2-Trichloroethane	13	U	
71-43-2-----Benzene	13	U	
10061-01-5-----trans-1,3-Dichloropropene	13	U	
75-25-2-----Bromoform	13	U	
108-10-1-----4-Methyl-2-Pentanone	13	U	
591-78-6-----2-Hexanone	13	U	
127-18-4-----Tetrachloroethene	13	U	
79-34-5-----1,1,2,2-Tetrachloroethane	13	U	
108-88-3-----Toluene	13	U	
108-90-7-----Chlorobenzene	13	U	
100-41-4-----Ethylbenzene	13	U	
100-42-5-----Styrene	13	U	
1330-20-7-----Xylene (total)	13	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ96

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012614

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP843

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 23

Date Analyzed: 05/10/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.70	22	BJV

AV
 5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ97

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012615

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP864

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 29

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
74-87-3-----	Chloromethane	14	U	
74-83-9-----	Bromomethane	14	U	
75-01-4-----	Vinyl Chloride	14	U	
75-00-3-----	Chloroethane	14	U	
75-09-2-----	Methylene Chloride	16	BV	
67-64-1-----	Acetone	14	BJV	
75-15-0-----	Carbon Disulfide	14	U	
75-35-4-----	1,1-Dichloroethene	14	U	
75-34-3-----	1,1-Dichloroethane	14	U	
540-59-0-----	1,2-Dichloroethene (total)	14	U	
67-66-3-----	Chloroform	14	U	
107-06-2-----	1,2-Dichloroethane	14	U	
78-93-3-----	2-Butanone	14	U	
71-55-6-----	1,1,1-Trichloroethane	14	U	
56-23-5-----	Carbon Tetrachloride	14	U	
75-27-4-----	Bromodichloromethane	14	U	
78-87-5-----	1,2-Dichloropropane	14	U	
10061-02-6-----	cis-1,3-Dichloropropene	14	U	
79-01-6-----	Trichloroethene	14	U	
124-48-1-----	Dibromochloromethane	14	U	
79-00-5-----	1,1,2-Trichloroethane	14	U	
71-43-2-----	Benzene	14	U	
10061-01-5-----	trans-1,3-Dichloropropene	14	U	
75-25-2-----	Bromoform	14	U	
108-10-1-----	4-Methyl-2-Pentanone	14	U	
591-78-6-----	2-Hexanone	14	U	
127-18-4-----	Tetrachloroethene	14	U	
79-34-5-----	1,1,2,2-Tetrachloroethane	14	U	
108-88-3-----	Toluene	14	U	
108-90-7-----	Chlorobenzene	14	U	
100-41-4-----	Ethylbenzene	14	U	
100-42-5-----	Styrene	14	U	
1330-20-7-----	Xylene (total)	14	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ97

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012615

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP864

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 29

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	11.65	12	J
2.	UNKNOWN COLUMN BLEED	15.71	16	BJV

AV
 5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L , Name: RECRA ENVIRON

Contract: 68D50010

EXQ98

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012616

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FP865

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 12 Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND		
74-87-3-----	Chloromethane	11	U
74-83-9-----	Bromomethane	11	U
75-01-4-----	Vinyl Chloride	11	U
75-00-3-----	Chloroethane	11	U
75-09-2-----	Methylene Chloride	20	B V
67-64-1-----	Acetone	11	BJU
75-15-0-----	Carbon Disulfide	11	U
75-35-4-----	1,1-Dichloroethene	11	U
75-34-3-----	1,1-Dichloroethane	11	U
540-59-0-----	1,2-Dichloroethene (total)	11	U
67-66-3-----	Chloroform	11	U
107-06-2-----	1,2-Dichloroethane	11	U
78-93-3-----	2-Butanone	11	U
71-55-6-----	1,1,1-Trichloroethane	11	U
56-23-5-----	Carbon Tetrachloride	11	U
75-27-4-----	Bromodichloromethane	11	U
78-87-5-----	1,2-Dichloropropane	11	U
10061-02-6-----	cis-1,3-Dichloropropene	11	U
79-01-6-----	Trichloroethene	11	U
124-48-1-----	Dibromochloromethane	11	U
79-00-5-----	1,1,2-Trichloroethane	11	U
71-43-2-----	Benzene	11	U
10061-01-5-----	trans-1,3-Dichloropropene	11	U
75-25-2-----	Bromoform	11	U
108-10-1-----	4-Methyl-2-Pentanone	11	U
591-78-6-----	2-Hexanone	11	U
127-18-4-----	Tetrachloroethene	11	U
79-34-5-----	1,1,2,2-Tetrachloroethane	11	U
108-88-3-----	Toluene	11	U
108-90-7-----	Chlorobenzene	11	U
100-41-4-----	Ethylbenzene	11	U
100-42-5-----	Styrene	11	U
1330-20-7-----	Xylene (total)	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ98

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABES

Matrix: (soil/water) SOIL

Lab Sample ID: B5012616

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP865

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 12

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	15.71	18	BJ

AF

5-24-95

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ99

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012617

Sample wt/vol: 5.0 (g/mL) G

Lab File ID: FP866

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: not dec. 13

Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

74-87-3-----Chloromethane	11	U	
74-83-9-----Bromomethane	11	U	
75-01-4-----Vinyl Chloride	11	U	
75-00-3-----Chloroethane	11	U	
75-09-2-----Methylene Chloride	22	B	V
67-64-1-----Acetone	11	U	
75-15-0-----Carbon Disulfide	11	U	
75-35-4-----1,1-Dichloroethene	11	U	
75-34-3-----1,1-Dichloroethane	11	U	
540-59-0-----1,2-Dichloroethene (total)	11	U	
67-66-3-----Chloroform	11	U	
107-06-2-----1,2-Dichloroethane	11	U	
78-93-3-----2-Butanone	11	U	
71-55-6-----1,1,1-Trichloroethane	11	U	
56-23-5-----Carbon Tetrachloride	11	U	
75-27-4-----Bromodichloromethane	11	U	
78-87-5-----1,2-Dichloropropane	11	U	
10061-02-6-----cis-1,3-Dichloropropene	11	U	
79-01-6-----Trichloroethene	11	U	
124-48-1-----Dibromochloromethane	11	U	
79-00-5-----1,1,2-Trichloroethane	11	U	
71-43-2-----Benzene	11	U	
10061-01-5-----trans-1,3-Dichloropropene	11	U	
75-25-2-----Bromoform	11	U	
108-10-1-----4-Methyl-2-Pentanone	11	U	
591-78-6-----2-Hexanone	11	U	
127-18-4-----Tetrachloroethene	11	U	
79-34-5-----1,1,2,2-Tetrachloroethane	11	U	
108-88-3-----Toluene	11	U	
108-90-7-----Chlorobenzene	11	U	
100-41-4-----Ethylbenzene	11	U	
100-42-5-----Styrene	11	U	
1330-20-7-----Xylene (total)	11	U	

1E
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ99

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012617

Sample wt/vol: 5.0 (g/mL) G Lab File ID: FP866

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: not dec. 13 Date Analyzed: 05/11/95

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN COLUMN BLEED	11.65	10	J
2.	UNKNOWN COLUMN BLEED	15.69	31	BJV

AV

5-24-95

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	EABE5	87	83	86	83	77	88	77	75	0
02	EABE5RE	78	79	124	78	76	87	73	73	0
03	EABE6	84	82	66	84	81	89	79	79	0
04	EABE7	80	82	216 *	80	80	84	75	75	1
05	EABE7DL	72 D	78 D	81 D	74 D	78 D	73 D	73 D	69 D	0
06	EABE7RE	78	78	153 *	80	79	81	74	77	1
07	EABF4	83	83	179 *	79	80	85	76	75	1
08	EABF4RE	79	80	162 *	81	80	81	77	76	1
09	EABF5	86	84	212 *	85	84	91	79	74	1
10	EABF5RE	85	83	205 *	86	88	93	81	75	1
11	EABF6	86	80	110	84	80	78	78	78	0
12	EABF6RE	78	78	127	80	77	83	75	76	0
13	EABF7	92	88	79	85	84	92	82	81	0
14	EABF7RE	85	81	108	83	80	88	79	78	0
15	EABF8	89	85	78	88	82	91	80	81	0
16	EABF8RE	81	83	118	81	78	84	76	75	0
17	EABF9	82	82	152 *	84	83	88	77	79	1
18	EABF9RE	78	79	133	84	80	84	76	78	0
19	EABG1	81	83	60	84	81	82	81	82	0
20	EXQ92	93	85	108	86	81	94	81	81	0
21	EXQ92RE	83	81	163 *	83	83	93	76	77	1
22	EXQ93	81	83	140 *	82	81	91	76	75	1
23	EXQ93RE	82	81	149 *	85	83	86	77	77	1
24	EXQ94	85	85	176 *	86	86	94	81	80	1
25	EXQ94RE	80	81	154 *	86	86	90	81	79	1
26	EXQ95	83	78	160 *	84	82	90	78	76	1
27	EXQ95DL	77 D	84 D	94 D	82 D	87 D	84 D	78 D	75 D	0
28	EXQ95RE	84	83	139 *	88	94	87	81	79	1
29	EXQ96	78	77	179 *	81	78	89	75	75	1
30	EXQ96DL	72 D	79 D	89 D	80 D	80 D	77 D	76 D	72 D	0

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 (TPH) = Terphenyl-d14	(18-137)
S4 (PHL) = Phenol-d5	(24-113)
S5 (2FP) = 2-Fluorophenol	(25-121)
S6 (TBP) = 2,4,6-Tribromophenol	(19-122)
S7 (2CP) = 2-Chlorophenol-d4	(20-130) (advisory)
S8 (DCB) = 1,2-Dichlorobenzene-d4	(20-130) (advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	EXQ96RE	80	81	164 *	84	85	85	77	72	1
02	EXQ97	83	87	213 *	85	87	91	80	78	1
03	EXQ98	86	72	58	89	85	76	79	75	0
04	EXQ99	85	82	68	87	83	84	81	83	0
05	EXQ97MS	78	79	199 *	87	88	87	81	84	1
06	EXQ97MSD	79	78	206 *	81	86	83	77	80	1
07	SBLK1	84	86	60	85	80	83	80	84	0

QC LIMITS

S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl-d14	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)
S7 (2CP)	= 2-Chlorophenol-d4	(20-130) (advisory)
S8 (DCB)	= 1,2-Dichlorobenzene-d4	(20-130) (advisory)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABES

Matrix Spike - EPA Sample No.: EXQ97

Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	3520	0	4745	135 *	26- 90
2-Chlorophenol	3520	0	4116	117 *	25-102
1,4-Dichlorobenzene	2350	0	3423	146 *	28-104
N-Nitroso-di-n-prop. (1)	2350	0	3041	129 *	41-126
1,2,4-Trichlorobenzene	2350	0	2688	114 *	38-107
4-Chloro-3-methylphenol	3520	0	4463	127 *	26-103
Acenaphthene	2350	0	2782	118	31-137
4-Nitrophenol	3520	0	6325	180 *	11-114
2,4-Dinitrotoluene	2350	0	3468	148 *	28- 89
Pentachlorophenol	3520	0	5142	146 *	17-109
Pyrene	2350	871.8	7797	295 *	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	3520	4576	130 *	4	35	26- 90
2-Chlorophenol	3520	4038	115 *	2	50	25-102
1,4-Dichlorobenzene	2350	3261	139 *	5	27	28-104
N-Nitroso-di-n-prop. (1)	2350	2886	123	5	38	41-126
1,2,4-Trichlorobenzene	2350	2702	115 *	1	23	38-107
4-Chloro-3-methylphenol	3520	4473	127 *	0	33	26-103
Acenaphthene	2350	2754	117	1	19	31-137
4-Nitrophenol	3520	6004	171 *	5	50	11-114
2,4-Dinitrotoluene	2350	3332	142 *	4	47	28- 89
Pentachlorophenol	3520	5116	145 *	1	47	17-109
Pyrene	2350	7856	297 *	1	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 11 outside limits

Spike Recovery: 19 out of 22 outside limits

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK1

Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Lab File ID: DL383 Lab Sample ID: B5B002401

Instrument ID: 700404 Date Extracted: 05/06/95

Matrix: (soil/water) SOIL Date Analyzed: 05/13/95

Level: (low/med) LOW Time Analyzed: 1338

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	EABE5	B5012607	DL391	05/13/95
02	EABE5RE	B5012607RI	DL405	05/15/95
03	EABE6	B5012608	DL387	05/13/95
04	EABE7	B5012609	DL411	05/15/95
05	EABE7DL	B5012609DL	DL441	05/17/95
06	EABE7RE	B5012609RI	DL426	05/16/95
07	EABF4	B5012601	DL410	05/15/95
08	EABF4RE	B5012601RI	DL432	05/16/95
09	EABF5	B5012602	DL446	05/17/95
10	EABF5RE	B5012602RI	DL447	05/17/95
11	EABF6	B5012603	DL389	05/13/95
12	EABF6RE	B5012603RI	DL403	05/15/95
13	EABF7	B5012604	DL390	05/13/95
14	EABF7RE	B5012604RI	DL404	05/15/95
15	EABF8	B5012605	DL388	05/13/95
16	EABF8RE	B5012605RI	DL402	05/15/95
17	EABF9	B5012606	DL407	05/15/95
18	EABF9RE	B5012606RI	DL429	05/16/95
19	EABG1	B5012618	DL386	05/13/95
20	EXQ92	B5012610	DL392	05/13/95
21	EXQ92RE	B5012610RI	DL406	05/15/95
22	EXQ93	B5012611	DL408	05/15/95
23	EXQ93RE	B5012611RI	DL430	05/16/95
24	EXQ94	B5012612	DL409	05/15/95
25	EXQ94RE	B5012612RI	DL431	05/16/95
26	EXQ95	B5012613	DL427	05/16/95
27	EXQ95DL	B5012613DL	DL442	05/17/95
28	EXQ95RE	B5012613RI	DL444	05/17/95
29	EXQ96	B5012614	DL428	05/16/95
30	EXQ96DL	B5012614DL	DL443	05/17/95

COMMENTS:

4B
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBLK1

I Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABES
Lab File ID: DL383		Lab Sample ID: B5B002401
Instrument ID: 700404		Date Extracted: 05/06/95
Matrix: (soil/water) SOIL		Date Analyzed: 05/13/95
Level: (low/med) LOW		Time Analyzed: 1338

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01 EXQ96RE	B5012614RI	DL445	05/17/95
02 EXQ97	B5012615	DL412	05/16/95
03 EXQ98	B5012616	DL384	05/13/95
04 EXQ99	B5012617	DL385	05/13/95
05 EXQ97MS	B5012615MS	DL433	05/16/95
06 EXQ97MSD	B5012615SD	DL434	05/16/95

MENTS:

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

L. Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5B002401

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL383

Level: (low/med) LOW Date Received:

% Moisture: decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH:

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	330	U
111-44-4-----	bis(2-Chloroethyl)Ether	330	U
95-57-8-----	2-Chlorophenol	330	U
541-73-1-----	1,3-Dichlorobenzene	330	U
106-46-7-----	1,4-Dichlorobenzene	330	U
95-50-1-----	1,2-Dichlorobenzene	330	U
95-48-7-----	2-Methylphenol	330	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	330	U
106-44-5-----	4-Methylphenol	330	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	330	U
67-72-1-----	Hexachloroethane	330	U
98-95-3-----	Nitrobenzene	330	U
78-59-1-----	Isophorone	330	U
88-75-5-----	2-Nitrophenol	330	U
105-67-9-----	2,4-Dimethylphenol	330	U
111-91-1-----	bis(2-Chloroethoxy)Methane	330	U
120-83-2-----	2,4-Dichlorophenol	330	U
120-82-1-----	1,2,4-Trichlorobenzene	330	U
91-20-3-----	Naphthalene	330	U
106-47-8-----	4-Chloroaniline	330	U
87-68-3-----	Hexachlorobutadiene	330	U
59-50-7-----	4-Chloro-3-Methylphenol	330	U
91-57-6-----	2-Methylnaphthalene	330	U
77-47-4-----	Hexachlorocyclopentadiene	330	U
88-06-2-----	2,4,6-Trichlorophenol	330	U
95-95-4-----	2,4,5-Trichlorophenol	830	U
91-58-7-----	2-Chloronaphthalene	330	U
88-74-4-----	2-Nitroaniline	830	U
131-11-3-----	Dimethyl Phthalate	330	U
208-96-8-----	Acenaphthylene	330	U
606-20-2-----	2,6-Dinitrotoluene	330	U
99-09-2-----	3-Nitroaniline	830	U
83-32-9-----	Acenaphthene	330	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: RECRA ENVIRON Contract: 68D50010
 Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5
 Matrix: (soil/water) SOIL Lab Sample ID: B5B002401
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL383
 Level: (low/med) LOW Date Received:
 % Moisture: decanted: (Y/N) N Date Extracted: 05/06/95
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH:

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	830	U
100-02-7-----	4-Nitrophenol	830	U
132-64-9-----	Dibenzofuran	330	U
121-14-2-----	2,4-Dinitrotoluene	330	U
84-66-2-----	Diethylphthalate	330	U
7005-72-3-----	4-Chlorophenyl-phenylether	330	U
86-73-7-----	Fluorene	330	U
100-01-6-----	4-Nitroaniline	830	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	830	U
86-30-6-----	N-Nitrosodiphenylamine (1)	330	U
101-55-3-----	4-Bromophenyl-phenylether	330	U
118-74-1-----	Hexachlorobenzene	330	U
87-86-5-----	Pentachlorophenol	830	U
85-01-8-----	Phenanthrene	330	U
120-12-7-----	Anthracene	330	U
86-74-8-----	Carbazole	330	U
84-74-2-----	Di-n-Butylphthalate	330	U
206-44-0-----	Fluoranthene	330	U
129-00-0-----	Pyrene	330	U
85-68-7-----	Butylbenzylphthalate	330	U
91-94-1-----	3,3'-Dichlorobenzidine	330	U
56-55-3-----	Benzo(a)Anthracene	330	U
218-01-9-----	Chrysene	330	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	330	U
117-84-0-----	Di-n-Octyl Phthalate	330	U
205-99-2-----	Benzo(b)Fluoranthene	330	U
207-08-9-----	Benzo(k)Fluoranthene	330	U
50-32-8-----	Benzo(a)Pyrene	330	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	330	U
53-70-3-----	Dibenz(a,h)Anthracene	330	U
191-24-2-----	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECRA ENVIRON	Contract: 68D50010	SBLK1
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Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
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Matrix: (soil/water) SOIL	Lab Sample ID: B5B002401
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Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL383
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Level: (low/med) LOW	Date Received:
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% Moisture:	decanted: (Y/N) N	Date Extracted: 05/06/95
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Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/13/95
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Injection Volume: 2.0 (uL)	Dilution Factor: 1.0
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GPC Cleanup: (Y/N) Y	pH:
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Number TICs found: 2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG
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CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.07	300	J
2.	UNKNOWN	10.45	300	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012607
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL391
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	20	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/13/95
GPC Cleanup:	(Y/N) Y	pH:	7.3
Dilution Factor:	1.0		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	410	U
108-95-2-----	Phenol	410	U
111-44-4-----	bis(2-Chloroethyl)Ether	410	U
95-57-8-----	2-Chlorophenol	410	U
541-73-1-----	1,3-Dichlorobenzene	410	U
106-46-7-----	1,4-Dichlorobenzene	410	U
95-50-1-----	1,2-Dichlorobenzene	410	U
95-48-7-----	2-Methylphenol	410	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5-----	4-Methylphenol	410	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	410	U
67-72-1-----	Hexachloroethane	410	U
98-95-3-----	Nitrobenzene	410	U
78-59-1-----	Isophorone	410	U
88-75-5-----	2-Nitrophenol	410	U
105-67-9-----	2,4-Dimethylphenol	410	U
111-91-1-----	bis(2-Chloroethoxy)Methane	410	U
120-83-2-----	2,4-Dichlorophenol	410	U
120-82-1-----	1,2,4-Trichlorobenzene	410	U
91-20-3-----	Naphthalene	410	U
106-47-8-----	4-Chloroaniline	410	U
87-68-3-----	Hexachlorobutadiene	410	U
59-50-7-----	4-Chloro-3-Methylphenol	410	U
91-57-6-----	2-Methylnaphthalene	410	U
77-47-4-----	Hexachlorocyclopentadiene	410	U
88-06-2-----	2,4,6-Trichlorophenol	410	U
95-95-4-----	2,4,5-Trichlorophenol	1000	U
91-58-7-----	2-Chloronaphthalene	410	U
88-74-4-----	2-Nitroaniline	1000	U
131-11-3-----	Dimethyl Phthalate	410	U
208-96-8-----	Acenaphthylene	410	U
606-20-2-----	2,6-Dinitrotoluene	410	U
99-09-2-----	3-Nitroaniline	1000	U
83-32-9-----	Acenaphthene	410	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE5

Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	
Matrix: (soil/water) SOIL		Lab Sample ID: B5012607	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID: DL391	
Level: (low/med)	LOW	Date Received: 05/05/95	
% Moisture:	20	decanted: (Y/N) N	Date Extracted: 05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed: 05/13/95	
Injection Volume:	2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) Y	pH: 7.3		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	410	U
121-14-2-----	2,4-Dinitrotoluene	410	U
84-66-2-----	Diethylphthalate	25	J
7005-72-3-----	4-Chlorophenyl-phenylether	410	U
86-73-7-----	Fluorene	410	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	410	U
101-55-3-----	4-Bromophenyl-phenylether	410	U
118-74-1-----	Hexachlorobenzene	410	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	120	J
120-12-7-----	Anthracene	410	U
86-74-8-----	Carbazole	410	U
84-74-2-----	Di-n-Butylphthalate	72	J
206-44-0-----	Fluoranthene	280	J
129-00-0-----	Pyrene	200	J
85-68-7-----	Butylbenzylphthalate	260	J
91-94-1-----	3,3'-Dichlorobenzidine	410	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	160	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	810	
117-84-0-----	Di-n-Octyl Phthalate	92	J
205-99-2-----	Benzo(b)Fluoranthene	190	J
207-08-9-----	Benzo(k)Fluoranthene	150	J
50-32-8-----	Benzo(a)Pyrene	130	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	410	U
53-70-3-----	Dibenz(a,h)Anthracene	410	U
191-24-2-----	Benzo(g,h,i)Perylene	410	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L Name: RECRA ENVIRON	Contract: 68D50010	EABE5	
Lab Code: RECMD	Case No.: 23525	SAS No.:	
Matrix: (soil/water) SOIL		Lab Sample ID: B5012607	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID: DL391	
Level: (low/med)	LOW	Date Received: 05/05/95	
% Moisture:	20	decanted: (Y/N) N	Date Extracted: 05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed: 05/13/95	
Injection Volume:	2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) Y	pH: 7.3		

CONCENTRATION UNITS:
 Number TICs found: 17 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.07	740	BJL
2.	UNKNOWN	10.46	360	BJL
3.	UNKNOWN	11.30	890	J
4.	UNKNOWN ALCOHOL	13.77	340	J
5.	UNKNOWN ACID	16.51	90	J
6.	UNKNOWN	20.81	95	J
7.	UNKNOWN	23.69	140	J
8. 57103	Hexadecanoic acid	23.80	340	JN
9.	UNKNOWN CHLORDANE ISOMER	24.86	170	J
10.	UNKNOWN	25.58	91	J
11. 1024573	Heptachlor epoxide	25.80	260	JN
12.	UNKNOWN	26.17	170	J
13.	UNKNOWN CHLORDANE ISOMER	26.31	630	J
14.	UNKNOWN	28.37	540	J
15.	UNKNOWN	28.89	920	J
16.	UNKNOWN	32.26	310	J
17.	UNKNOWN ALCOHOL	33.00	880	J

AV
 5-15-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE5RE

1 Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012607RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL405

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	410	U
111-44-4-----	bis(2-Chloroethyl)Ether	410	U
95-57-8-----	2-Chlorophenol	410	U
541-73-1-----	1,3-Dichlorobenzene	410	U
106-46-7-----	1,4-Dichlorobenzene	410	U
95-50-1-----	1,2-Dichlorobenzene	410	U
95-48-7-----	2-Methylphenol	410	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	410	U
106-44-5-----	4-Methylphenol	410	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	410	U
67-72-1-----	Hexachloroethane	410	U
98-95-3-----	Nitrobenzene	410	U
78-59-1-----	Isophorone	410	U
88-75-5-----	2-Nitrophenol	410	U
105-67-9-----	2,4-Dimethylphenol	410	U
111-91-1-----	bis(2-Chloroethoxy)Methane	410	U
120-83-2-----	2,4-Dichlorophenol	410	U
120-82-1-----	1,2,4-Trichlorobenzene	410	U
91-20-3-----	Naphthalene	410	U
106-47-8-----	4-Chloroaniline	410	U
87-68-3-----	Hexachlorobutadiene	410	U
59-50-7-----	4-Chloro-3-Methylphenol	410	U
91-57-6-----	2-Methylnaphthalene	410	U
77-47-4-----	Hexachlorocyclopentadiene	410	U
88-06-2-----	2,4,6-Trichlorophenol	410	U
95-95-4-----	2,4,5-Trichlorophenol	1000	U
91-58-7-----	2-Chloronaphthalene	410	U
88-74-4-----	2-Nitroaniline	1000	U
131-11-3-----	Dimethyl Phthalate	410	U
208-96-8-----	Acenaphthylene	410	U
606-20-2-----	2,6-Dinitrotoluene	410	U
99-09-2-----	3-Nitroaniline	1000	U
83-32-9-----	Acenaphthene	410	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE5RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012607RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL405

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 20 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	410	U
121-14-2-----	2,4-Dinitrotoluene	410	U
84-66-2-----	Diethylphthalate	26	J
7005-72-3-----	4-Chlorophenyl-phenylether	410	U
86-73-7-----	Fluorene	410	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	410	U
101-55-3-----	4-Bromophenyl-phenylether	410	U
118-74-1-----	Hexachlorobenzene	410	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	120	J
120-12-7-----	Anthracene	410	U
86-74-8-----	Carbazole	410	U
84-74-2-----	Di-n-Butylphthalate	66	J
206-44-0-----	Fluoranthene	260	J
129-00-0-----	Pyrene	310	J
85-68-7-----	Butylbenzylphthalate	270	J
91-94-1-----	3,3'-Dichlorobenzidine	410	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	160	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	700	
117-84-0-----	Di-n-Octyl Phthalate	60	J
205-99-2-----	Benzo(b)Fluoranthene	160	J
207-08-9-----	Benzo(k)Fluoranthene	140	J
50-32-8-----	Benzo(a)Pyrene	140	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	410	U
53-70-3-----	Dibenz(a,h) Anthracene	410	U
191-24-2-----	Benzo(g,h,i) Perylene	410	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L Name: RECRA ENVIRON	Contract: 68D50010	EABE5RE
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012607RI
Sample wt/vol: 30.0 (g/mL) G		Lab File ID: DL405
Level: (low/med) LOW		Date Received: 05/05/95
% Moisture: 20	decanted: (Y/N) N	Date Extracted: 05/06/95
Concentrated Extract Volume: 500.0 (uL)		Date Analyzed: 05/15/95
Injection Volume: 2.0 (uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 7.3	

CONCENTRATION UNITS:
Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	660	BJV
2.	UNKNOWN	10.37	320	BJV
3.	UNKNOWN	11.23	780	J
4.	UNKNOWN	13.38	120	J
5.	UNKNOWN ALCOHOL	13.72	290	J
6.	UNKNOWN ACID	16.46	100	J
7.	UNKNOWN	23.63	180	J
8. 57103	Hexadecanoic acid	23.76	350	JN
9.	UNKNOWN CHLORDANE ISOMER	24.81	180	J
10.	UNKNOWN	25.54	110	J
11. 1024573	Heptachlor epoxide	25.75	200	JN
12.	UNKNOWN	26.12	190	J
13.	UNKNOWN CHLORDANE ISOMER	26.26	560	J
14.	UNKNOWN	28.31	650	J
15.	UNKNOWN	28.84	580	J

AV
5-25-95

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE6

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012608

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL387

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl)Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	430	U
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	430	U
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	430	U

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE6

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012608

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL387

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.5

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	430	U
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	24	J
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	430	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	97	J
120-12-7-----	Anthracene	430	U
86-74-8-----	Carbazole	430	U
84-74-2-----	Di-n-Butylphthalate	38	J
206-44-0-----	Fluoranthene	250	J
129-00-0-----	Pyrene	150	J
85-68-7-----	Butylbenzylphthalate	24	J
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	140	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	190	J
117-84-0-----	Di-n-Octyl Phthalate	430	U
205-99-2-----	Benzo(b)Fluoranthene	120	J
207-08-9-----	Benzo(k)Fluoranthene	180	J
50-32-8-----	Benzo(a)Pyrene	120	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	43	J
53-70-3-----	Dibenz(a,h)Anthracene	430	U
191-24-2-----	Benzo(g,h,i)Perylene	430	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABE6

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012608
Sample wt/vol:	30.0 (g/mL) G	Lab File ID: DL387
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture:	23 decanted: (Y/N) N	Date Extracted: 05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed: 05/13/95
Injection Volume:	2.0 (uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 7.5	

CONCENTRATION UNITS:
Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.08	930	BJV
2.	UNKNOWN	10.46	290	BJV
3.	UNKNOWN	11.01	140	J
4.	UNKNOWN	11.31	960	J
5.	UNKNOWN ALCOHOL	13.78	390	J
6.	UNKNOWN ACID	16.51	110	J
7.	UNKNOWN ACID	22.26	110	J
8.	UNKNOWN	23.64	140	J
9. 57103	Hexadecanoic acid	23.80	480	JN
10.	UNKNOWN	25.73	91	J
11. 57114	Octadecanoic acid	25.85	100	JN
12.	UNKNOWN	28.89	530	J
13.	UNKNOWN	30.72	130	J
14.	UNKNOWN	32.26	260	J
15.	UNKNOWN ALCOHOL	33.00	7000	J

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7

I Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012609

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL411

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	380	U
111-44-4-----	bis(2-Chloroethyl)Ether	380	U
95-57-8-----	2-Chlorophenol	380	U
541-73-1-----	1,3-Dichlorobenzene	380	U
106-46-7-----	1,4-Dichlorobenzene	380	U
95-50-1-----	1,2-Dichlorobenzene	380	U
95-48-7-----	2-Methylphenol	380	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5-----	4-Methylphenol	380	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	380	U
67-72-1-----	Hexachloroethane	380	U
98-95-3-----	Nitrobenzene	380	U
78-59-1-----	Isophorone	380	U
88-75-5-----	2-Nitrophenol	380	U
105-67-9-----	2,4-Dimethylphenol	380	U
111-91-1-----	bis(2-Chloroethoxy)Methane	380	U
120-83-2-----	2,4-Dichlorophenol	380	U
120-82-1-----	1,2,4-Trichlorobenzene	380	U
91-20-3-----	Naphthalene	22	J
106-47-8-----	4-Chloroaniline	380	U
87-68-3-----	Hexachlorobutadiene	380	U
59-50-7-----	4-Chloro-3-Methylphenol	380	U
91-57-6-----	2-Methylnaphthalene	19	J
77-47-4-----	Hexachlorocyclopentadiene	380	U
88-06-2-----	2,4,6-Trichlorophenol	380	U
95-95-4-----	2,4,5-Trichlorophenol	950	U
91-58-7-----	2-Chloronaphthalene	380	U
88-74-4-----	2-Nitroaniline	950	U
131-11-3-----	Dimethyl Phthalate	380	U
208-96-8-----	Acenaphthylene	380	U
606-20-2-----	2,6-Dinitrotoluene	380	U
99-09-2-----	3-Nitroaniline	950	U
83-32-9-----	Acenaphthene	72	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7

I Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	SAS No.:	
Sample wt/vol:	30.0 (g/mL) G	Lab Sample ID:	B5012609
Level:	(low/med) LOW	Lab File ID:	DL411
% Moisture:	13	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/15/95
GPC Cleanup:	(Y/N) Y	pH:	7.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	950	U
100-02-7-----	4-Nitrophenol	950	U
132-64-9-----	Dibenzofuran	46	J
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	25	J
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	90	J
100-01-6-----	4-Nitroaniline	950	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	950	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	950	U
85-01-8-----	Phenanthrene	910	
120-12-7-----	Anthracene	140	J
86-74-8-----	Carbazole	86	J
84-74-2-----	Di-n-Butylphthalate	5600	E
206-44-0-----	Fluoranthene	950	
129-00-0-----	Pyrene	2500	
85-68-7-----	Butylbenzylphthalate	1200	
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)Anthracene	460	
218-01-9-----	Chrysene	520	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	10000	E
117-84-0-----	Di-n-Octyl Phthalate	220	J
205-99-2-----	Benzo(b)Fluoranthene	430	
207-08-9-----	Benzo(k)Fluoranthene	510	
50-32-8-----	Benzo(a)Pyrene	590	
193-39-5-----	Indeno(1,2,3-cd)Pyrene	400	
53-70-3-----	Dibenz(a,h)Anthracene	380	U
191-24-2-----	Benzo(g,h,i)Perylene	440	

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABE7

L Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	SDG No.:	EABE5
Sample wt/vol:	30.0 (g/mL) G	Lab Sample ID:	B5012609
Level:	(low/med) LOW	Lab File ID:	DL411
% Moisture:	13 decanted: (Y/N) N	Date Received:	05/05/95
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/15/95
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0
GPC Cleanup:	(Y/N) Y	pH:	7.9

CONCENTRATION UNITS:

Number TICs found: 10 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	710	BJ
2.	UNKNOWN	10.37	230	BJ
3.	UNKNOWN	11.24	740	J
4.	UNKNOWN ALCOHOL	13.72	310	J
5.	UNKNOWN	16.47	130	J
6. 120321	Chlorophene	23.70	110	JN
7. 57103	Hexadecanoic acid	23.77	400	JN
8. 57114	Octadecanoic acid	25.81	100	JN
9.	UNKNOWN BENZENEDICARBOXYLIC	27.02	1500	J
10. 78513	Ethanol, 2-butoxy-, phosphat	28.14	5700	JN

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7DL

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012609DL		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL441		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 13 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/17/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 4.0		
GPC Cleanup: (Y/N) Y	pH: 7.9	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	1500	U
111-44-4-----	bis(2-Chloroethyl) Ether	1500	U
95-57-8-----	2-Chlorophenol	1500	U
541-73-1-----	1,3-Dichlorobenzene	1500	U
106-46-7-----	1,4-Dichlorobenzene	1500	U
95-50-1-----	1,2-Dichlorobenzene	1500	U
95-48-7-----	2-Methylphenol	1500	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	1500	U
106-44-5-----	4-Methylphenol	1500	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	1500	U
67-72-1-----	Hexachloroethane	1500	U
98-95-3-----	Nitrobenzene	1500	U
78-59-1-----	Isophorone	1500	U
88-75-5-----	2-Nitrophenol	1500	U
105-67-9-----	2,4-Dimethylphenol	1500	U
111-91-1-----	bis(2-Chloroethoxy) Methane	1500	U
120-83-2-----	2,4-Dichlorophenol	1500	U
120-82-1-----	1,2,4-Trichlorobenzene	1500	U
91-20-3-----	Naphthalene	1500	U
106-47-8-----	4-Chloroaniline	1500	U
87-68-3-----	Hexachlorobutadiene	1500	U
59-50-7-----	4-Chloro-3-Methylphenol	1500	U
91-57-6-----	2-Methylnaphthalene	1500	U
77-47-4-----	Hexachlorocyclopentadiene	1500	U
88-06-2-----	2,4,6-Trichlorophenol	1500	U
95-95-4-----	2,4,5-Trichlorophenol	3800	U
91-58-7-----	2-Chloronaphthalene	1500	U
88-74-4-----	2-Nitroaniline	3800	U
131-11-3-----	Dimethyl Phthalate	1500	U
208-96-8-----	Acenaphthylene	1500	U
606-20-2-----	2,6-Dinitrotoluene	1500	U
99-09-2-----	3-Nitroaniline	3800	U
83-32-9-----	Acenaphthene	1500	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7DL

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012609DL		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL441		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 13 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/17/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 4.0		
GPC Cleanup: (Y/N) Y	pH: 7.9	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	3800	U
100-02-7-----	4-Nitrophenol	3800	U
132-64-9-----	Dibenzofuran	1500	U
121-14-2-----	2,4-Dinitrotoluene	1500	U
84-66-2-----	Diethylphthalate	1500	U
7005-72-3-----	4-Chlorophenyl-phenylether	1500	U
86-73-7-----	Fluorene	83	DJ
100-01-6-----	4-Nitroaniline	3800	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	3800	U
86-30-6-----	N-Nitrosodiphenylamine (1)	1500	U
101-55-3-----	4-Bromophenyl-phenylether	1500	U
118-74-1-----	Hexachlorobenzene	1500	U
87-86-5-----	Pentachlorophenol	3800	U
85-01-8-----	Phenanthrene	880	DJ
120-12-7-----	Anthracene	130	DJ
86-74-8-----	Carbazole	83	DJ
84-74-2-----	Di-n-Butylphthalate	6300	D
206-44-0-----	Fluoranthene	1200	DJ
129-00-0-----	Pyrene	910	DJ
85-68-7-----	Butylbenzylphthalate	660	DJ
91-94-1-----	3,3'-Dichlorobenzidine	1500	U
56-55-3-----	Benzo(a)Anthracene	400	DJ
218-01-9-----	Chrysene	440	DJ
117-81-7-----	bis(2-Ethylhexyl)Phthalate	6700	D
117-84-0-----	Di-n-Octyl Phthalate	240	DJ
205-99-2-----	Benzo(b)Fluoranthene	450	DJ
207-08-9-----	Benzo(k)Fluoranthene	620	DJ
50-32-8-----	Benzo(a)Pyrene	390	DJ
193-39-5-----	Indeno(1,2,3-cd)Pyrene	280	DJ
53-70-3-----	Dibenz(a,h)Anthracene	1500	U
191-24-2-----	Benzo(g,h,i)Perylene	230	DJ

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABE7DL

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012609DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL441

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 7.9

CONCENTRATION UNITS:

Number TICs found: 7 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.01	800	BJV
2.	UNKNOWN	11.21	1000	J
3.	UNKNOWN BENZENEDICARBOXYLIC	26.89	520	J
4. 78513	Ethanol, 2-butoxy-, phosphat	28.01	3600	JN
5.	UNKNOWN COLUMN BLEED	30.41	780	J
6.	UNKNOWN COLUMN BLEED	32.54	1600	J
7.	UNKNOWN COLUMN BLEED	35.36	2000	J

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5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7RE

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012609RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL426		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	13	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.9		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	380	U
111-44-4-----	bis(2-Chloroethyl)Ether	380	U
95-57-8-----	2-Chlorophenol	380	U
541-73-1-----	1,3-Dichlorobenzene	380	U
106-46-7-----	1,4-Dichlorobenzene	380	U
95-50-1-----	1,2-Dichlorobenzene	380	U
95-48-7-----	2-Methylphenol	380	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5-----	4-Methylphenol	380	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	380	U
67-72-1-----	Hexachloroethane	380	U
98-95-3-----	Nitrobenzene	380	U
78-59-1-----	Isophorone	380	U
88-75-5-----	2-Nitrophenol	380	U
105-67-9-----	2,4-Dimethylphenol	380	U
111-91-1-----	bis(2-Chloroethoxy)Methane	380	U
120-83-2-----	2,4-Dichlorophenol	380	U
120-82-1-----	1,2,4-Trichlorobenzene	380	U
91-20-3-----	Naphthalene	22	J
106-47-8-----	4-Chloroaniline	380	U
87-68-3-----	Hexachlorobutadiene	380	U
59-50-7-----	4-Chloro-3-Methylphenol	380	U
91-57-6-----	2-Methylnaphthalene	380	U
77-47-4-----	Hexachlorocyclopentadiene	380	U
88-06-2-----	2,4,6-Trichlorophenol	380	U
95-95-4-----	2,4,5-Trichlorophenol	950	U
91-58-7-----	2-Chloronaphthalene	380	U
88-74-4-----	2-Nitroaniline	950	U
131-11-3-----	Dimethyl Phthalate	380	U
208-96-8-----	Acenaphthylene	380	U
606-20-2-----	2,6-Dinitrotoluene	380	U
99-09-2-----	3-Nitroaniline	950	U
83-32-9-----	Acenaphthene	72	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7RE

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012609RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL426		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	13	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.9		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	950	U
100-02-7-----	4-Nitrophenol	950	U
132-64-9-----	Dibenzofuran	50	J
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	25	J
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	93	J
100-01-6-----	4-Nitroaniline	950	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	950	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	950	U
85-01-8-----	Phenanthrene	880	
120-12-7-----	Anthracene	140	J
86-74-8-----	Carbazole	92	J
84-74-2-----	Di-n-Butylphthalate	4800	E
206-44-0-----	Fluoranthene	1300	
129-00-0-----	Pyrene	1900	
85-68-7-----	Butylbenzylphthalate	980	
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)Anthracene	430	
218-01-9-----	Chrysene	510	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	7700	E
117-84-0-----	Di-n-Octyl Phthalate	380	
205-99-2-----	Benzo(b)Fluoranthene	570	
207-08-9-----	Benzo(k)Fluoranthene	590	
50-32-8-----	Benzo(a)Pyrene	530	
193-39-5-----	Indeno(1,2,3-cd)Pyrene	260	J
53-70-3-----	Dibenz(a,h)Anthracene	380	U
191-24-2-----	Benzo(g,h,i)Perylene	370	J

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

L Name: RECRA ENVIRON	Contract: 68D50010	EABE7RE			
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012609RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL426		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	13	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.9		

CONCENTRATION UNITS:

Number TICs found: 10 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.80	710	BJV
2.	UNKNOWN	10.18	240	BJV
3.	UNKNOWN	11.06	890	J
4.	UNKNOWN ALCOHOL	13.61	300	J
5.	UNKNOWN	16.37	130	J
6. 57103	Hexadecanoic acid	23.69	260	JN
7.	UNKNOWN PNA MW190	24.30	140	J
8.	UNKNOWN BENZENEDICARBOXYLIC	26.92	1100	J
9. 78513	Ethanol, 2-butoxy-, phosphat	28.06	3900	JN
10.	UNKNOWN COLUMN BLEED	35.45	1000	J

AV
5.25-95

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EABF4

I Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012601

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL410

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 28 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND			
108-95-2-----	Phenol	460	U	
111-44-4-----	bis(2-Chloroethyl) Ether	460	U	
95-57-8-----	2-Chlorophenol	460	U	
541-73-1-----	1,3-Dichlorobenzene	460	U	
106-46-7-----	1,4-Dichlorobenzene	460	U	
95-50-1-----	1,2-Dichlorobenzene	460	U	
95-48-7-----	2-Methylphenol	460	U	
108-60-1-----	2,2'-oxybis(1-Chloropropane)	460	U	
106-44-5-----	4-Methylphenol	460	U	
621-64-7-----	N-Nitroso-Di-n-Propylamine	460	U	
67-72-1-----	Hexachloroethane	460	U	
98-95-3-----	Nitrobenzene	460	U	
78-59-1-----	Isophorone	460	U	
88-75-5-----	2-Nitrophenol	460	U	
105-67-9-----	2,4-Dimethylphenol	460	U	
111-91-1-----	bis(2-Chloroethoxy) Methane	460	U	
120-83-2-----	2,4-Dichlorophenol	460	U	
120-82-1-----	1,2,4-Trichlorobenzene	460	U	
91-20-3-----	Naphthalene	460	U	
106-47-8-----	4-Chloroaniline	460	U	
87-68-3-----	Hexachlorobutadiene	460	U	
59-50-7-----	4-Chloro-3-Methylphenol	460	U	
91-57-6-----	2-Methylnaphthalene	44	J	
77-47-4-----	Hexachlorocyclopentadiene	460	U	
88-06-2-----	2,4,6-Trichlorophenol	460	U	
95-95-4-----	2,4,5-Trichlorophenol	1200	U	
91-58-7-----	2-Chloronaphthalene	460	U	
88-74-4-----	2-Nitroaniline	1200	U	
131-11-3-----	Dimethyl Phthalate	460	U	
208-96-8-----	Acenaphthylene	460	U	
606-20-2-----	2,6-Dinitrotoluene	460	U	
99-09-2-----	3-Nitroaniline	1200	U	
83-32-9-----	Acenaphthene	460	U	

1C
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF4

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012601		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL410		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	28	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/15/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.3		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1200	U
100-02-7-----	4-Nitrophenol	1200	U
132-64-9-----	Dibenzofuran	460	U
121-14-2-----	2,4-Dinitrotoluene	460	U
84-66-2-----	Diethylphthalate	28	J
7005-72-3-----	4-Chlorophenyl-phenylether	460	U
86-73-7-----	Fluorene	460	U
100-01-6-----	4-Nitroaniline	1200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	460	U
101-55-3-----	4-Bromophenyl-phenylether	460	U
118-74-1-----	Hexachlorobenzene	460	U
87-86-5-----	Pentachlorophenol	1200	U
85-01-8-----	Phenanthrene	250	J
120-12-7-----	Anthracene	26	J
86-74-8-----	Carbazole	29	J
84-74-2-----	Di-n-Butylphthalate	65	J
206-44-0-----	Fluoranthene	370	J
129-00-0-----	Pyrene	730	
85-68-7-----	Butylbenzylphthalate	460	U
91-94-1-----	3,3'-Dichlorobenzidine	460	U
56-55-3-----	Benzo(a)Anthracene	160	J
218-01-9-----	Chrysene	220	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	200	J
117-84-0-----	Di-n-Octyl Phthalate	460	U
205-99-2-----	Benzo(b)Fluoranthene	250	J
207-08-9-----	Benzo(k)Fluoranthene	200	J
50-32-8-----	Benzo(a)Pyrene	190	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	210	J
53-70-3-----	Dibenz(a,h)Anthracene	460	U
191-24-2-----	Benzo(g,h,i)Perylene	230	J

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF4

L Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012601		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL410		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	28	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/15/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.3		

CONCENTRATION UNITS:

Number TICs found: 12 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	1000	BJV
2.	UNKNOWN	10.37	270	BJV
3.	UNKNOWN	11.23	740	J
4.	UNKNOWN	13.38	160	J
5.	UNKNOWN ALCOHOL	13.72	350	J
6.	UNKNOWN ACID	16.46	160	J
7. 1002842	Pentadecanoic acid	22.22	110	JN
8.	UNKNOWN	23.60	110	J
9.	UNKNOWN	23.69	160	J
10. 57103	Hexadecanoic acid	23.76	550	JN
11.	UNKNOWN DDE ISOMER	26.75	260	J
12.	UNKNOWN COLUMN BLEED	32.92	1100	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name:	RECRA ENVIRON	Contract:	68D50010			
Lab Code:	RECMD	Case No.:	23525	SAS No.:	SDG No.:	EABE5
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012601RI			
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL432			
Level:	(low/med) LOW	Date Received:	05/05/95			
% Moisture:	28	decanted: (Y/N)	N	Date Extracted:	05/06/95	
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95			
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0			
GPC Cleanup:	(Y/N) Y	pH:	7.3	CONCENTRATION UNITS:		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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108-95-2-----	Phenol	460	U
111-44-4-----	bis(2-Chloroethyl) Ether	460	U
95-57-8-----	2-Chlorophenol	460	U
541-73-1-----	1,3-Dichlorobenzene	460	U
106-46-7-----	1,4-Dichlorobenzene	460	U
95-50-1-----	1,2-Dichlorobenzene	460	U
95-48-7-----	2-Methylphenol	460	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	460	U
106-44-5-----	4-Methylphenol	460	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	460	U
67-72-1-----	Hexachloroethane	460	U
98-95-3-----	Nitrobenzene	460	U
78-59-1-----	Isophorone	460	U
88-75-5-----	2-Nitrophenol	460	U
105-67-9-----	2,4-Dimethylphenol	460	U
111-91-1-----	bis(2-Chloroethoxy) Methane	460	U
120-83-2-----	2,4-Dichlorophenol	460	U
120-82-1-----	1,2,4-Trichlorobenzene	460	U
91-20-3-----	Naphthalene	460	U
106-47-8-----	4-Chloroaniline	460	U
87-68-3-----	Hexachlorobutadiene	460	U
59-50-7-----	4-Chloro-3-Methylphenol	460	U
91-57-6-----	2-Methylnaphthalene	41	J
77-47-4-----	Hexachlorocyclopentadiene	460	U
88-06-2-----	2,4,6-Trichlorophenol	460	U
95-95-4-----	2,4,5-Trichlorophenol	1200	U
91-58-7-----	2-Chloronaphthalene	460	U
88-74-4-----	2-Nitroaniline	1200	U
131-11-3-----	Dimethyl Phthalate	460	U
208-96-8-----	Acenaphthylene	460	U
606-20-2-----	2,6-Dinitrotoluene	460	U
99-09-2-----	3-Nitroaniline	1200	U
83-32-9-----	Acenaphthene	460	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name:	RECRA ENVIRON	Contract:	68D50010	EABF4RE		
Lab Code:	RECMD	Case No.:	23525	SAS No.:	SDG No.:	EABE5
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012601RI			
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL432			
Level:	(low/med) LOW	Date Received:	05/05/95			
% Moisture:	28	decanted:	(Y/N) N	Date Extracted:	05/06/95	
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95			
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0			
GPC Cleanup:	(Y/N) Y	pH:	7.3	CONCENTRATION UNITS:		

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1200	U	
100-02-7-----	4-Nitrophenol	1200	U	
132-64-9-----	Dibenzofuran	460	U	
121-14-2-----	2,4-Dinitrotoluene	460	U	
84-66-2-----	Diethylphthalate	31	J	
7005-72-3-----	4-Chlorophenyl-phenylether	460	U	
86-73-7-----	Fluorene	460	U	
100-01-6-----	4-Nitroaniline	1200	U	
534-52-1-----	4,6-Dinitro-2-Methylphenol	1200	U	
86-30-6-----	N-Nitrosodiphenylamine (1)	460	U	
101-55-3-----	4-Bromophenyl-phenylether	460	U	
118-74-1-----	Hexachlorobenzene	460	U	
87-86-5-----	Pentachlorophenol	1200	U	
85-01-8-----	Phenanthrene	240	J	
120-12-7-----	Anthracene	460	U	
86-74-8-----	Carbazole	30	J	
84-74-2-----	Di-n-Butylphthalate	63	J	
206-44-0-----	Fluoranthene	400	J	
129-00-0-----	Pyrene	630		
85-68-7-----	Butylbenzylphthalate	62	J	
91-94-1-----	3,3'-Dichlorobenzidine	460	U	
56-55-3-----	Benzo(a)Anthracene	180	J	
218-01-9-----	Chrysene	250	J	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	220	J	
117-84-0-----	Di-n-Octyl Phthalate	460	U	
205-99-2-----	Benzo(b)Fluoranthene	190	J	
207-08-9-----	Benzo(k)Fluoranthene	300	J	
50-32-8-----	Benzo(a)Pyrene	260	J	
193-39-5-----	Indeno(1,2,3-cd) Pyrene	200	J	
53-70-3-----	Dibenz(a,h) Anthracene	9	J	
191-24-2-----	Benzo(g,h,i) Perylene	270	J	

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

L Name: RECRA ENVIRON Contract: 68D50010

EABF4RE

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012601RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL432

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 28 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

Number TICs found: 9 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.82	1000	BJU
2.	UNKNOWN	10.20	410	BJU
3.	UNKNOWN	11.08	980	J
4.	UNKNOWN	13.28	150	J
5.	UNKNOWN ALCOHOL	13.63	340	J
6.	UNKNOWN ACID	16.38	160	J
7.	UNKNOWN	19.64	130	J
8. 57103	Hexadecanoic acid	23.70	330	JN
9.	UNKNOWN	28.78	330	J

JK
5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF5

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012602		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL446		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 9 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/17/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N) Y	pH: 8.2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND		
108-95-2-----	Phenol	360	U
111-44-4-----	bis(2-Chloroethyl)Ether	360	U
95-57-8-----	2-Chlorophenol	360	U
541-73-1-----	1,3-Dichlorobenzene	360	U
106-46-7-----	1,4-Dichlorobenzene	360	U
95-50-1-----	1,2-Dichlorobenzene	360	U
95-48-7-----	2-Methylphenol	360	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5-----	4-Methylphenol	360	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	360	U
67-72-1-----	Hexachloroethane	360	U
98-95-3-----	Nitrobenzene	360	U
78-59-1-----	Isophorone	360	U
88-75-5-----	2-Nitrophenol	360	U
105-67-9-----	2,4-Dimethylphenol	360	U
111-91-1-----	bis(2-Chloroethoxy)Methane	360	U
120-83-2-----	2,4-Dichlorophenol	360	U
120-82-1-----	1,2,4-Trichlorobenzene	360	U
91-20-3-----	Naphthalene	360	U
106-47-8-----	4-Chloroaniline	360	U
87-68-3-----	Hexachlorobutadiene	360	U
59-50-7-----	4-Chloro-3-Methylphenol	360	U
91-57-6-----	2-Methylnaphthalene	29	J
77-47-4-----	Hexachlorocyclopentadiene	360	U
88-06-2-----	2,4,6-Trichlorophenol	360	U
95-95-4-----	2,4,5-Trichlorophenol	910	U
91-58-7-----	2-Chloronaphthalene	360	U
88-74-4-----	2-Nitroaniline	910	U
131-11-3-----	Dimethyl Phthalate	360	U
208-96-8-----	Acenaphthylene	360	U
606-20-2-----	2,6-Dinitrotoluene	360	U
99-09-2-----	3-Nitroaniline	910	U
83-32-9-----	Acenaphthene	26	J

1C
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF5

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012602		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL446		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	9	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/17/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	8.2		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	910	U
100-02-7-----	4-Nitrophenol	910	U
132-64-9-----	Dibenzofuran	21	J
121-14-2-----	2,4-Dinitrotoluene	360	U
84-66-2-----	Diethylphthalate	360	U
7005-72-3-----	4-Chlorophenyl-phenylether	360	U
86-73-7-----	Fluorene	21	J
100-01-6-----	4-Nitroaniline	910	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	910	U
86-30-6-----	N-Nitrosodiphenylamine (1)	360	U
101-55-3-----	4-Bromophenyl-phenylether	360	U
118-74-1-----	Hexachlorobenzene	360	U
87-86-5-----	Pentachlorophenol	910	U
85-01-8-----	Phenanthrene	550	
120-12-7-----	Anthracene	68	J
86-74-8-----	Carbazole	61	J
84-74-2-----	Di-n-Butylphthalate	39	J
206-44-0-----	Fluoranthene	710	
129-00-0-----	Pyrene	2700	
85-68-7-----	Butylbenzylphthalate	360	U
91-94-1-----	3,3'-Dichlorobenzidine	360	U
56-55-3-----	Benzo(a)Anthracene	620	
218-01-9-----	Chrysene	690	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	90	J
117-84-0-----	Di-n-Octyl Phthalate	360	U
205-99-2-----	Benzo(b)Fluoranthene	890	
207-08-9-----	Benzo(k)Fluoranthene	540	
50-32-8-----	Benzo(a)Pyrene	680	
193-39-5-----	Indeno(1,2,3-cd)Pyrene	970	
53-70-3-----	Dibenz(a,h)Anthracene	670	
191-24-2-----	Benzo(g,h,i)Perylene	780	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF5

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012602
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL446
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture:	9 . decanted: (Y/N) N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/17/95
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0
GPC Cleanup: (Y/N) Y	pH: 8.2		

CONCENTRATION UNITS:
Number TICs found: 11 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.61	160	J
2.	UNKNOWN	10.02	760	BJV
3.	UNKNOWN	10.40	290	BJV
4.	UNKNOWN	11.22	780	J
5.	UNKNOWN ALCOHOL	13.66	330	J
6.	UNKNOWN ACID	16.35	270	J
7.	UNKNOWN FLUOROBIPHENYL ISOME	16.61	340	J
8.	UNKNOWN MW204	17.34	260	J
9.	UNKNOWN ACID	19.59	160	J
10.	UNKNOWN	20.31	190	J
11.	UNKNOWN	20.40	2500	J

AKV
5/25/95

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF5RE

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012602RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL447

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 9 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2-----	Phenol	360	U
111-44-4-----	bis(2-Chloroethyl)Ether	360	U
95-57-8-----	2-Chlorophenol	360	U
541-73-1-----	1,3-Dichlorobenzene	360	U
106-46-7-----	1,4-Dichlorobenzene	360	U
95-50-1-----	1,2-Dichlorobenzene	360	U
95-48-7-----	2-Methylphenol	360	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	360	U
106-44-5-----	4-Methylphenol	360	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	360	U
67-72-1-----	Hexachloroethane	360	U
98-95-3-----	Nitrobenzene	360	U
78-59-1-----	Isophorone	360	U
88-75-5-----	2-Nitrophenol	360	U
105-67-9-----	2,4-Dimethylphenol	360	U
111-91-1-----	bis(2-Chloroethoxy)Methane	360	U
120-83-2-----	2,4-Dichlorophenol	360	U
120-82-1-----	1,2,4-Trichlorobenzene	360	U
91-20-3-----	Naphthalene	360	U
106-47-8-----	4-Chloroaniline	360	U
87-68-3-----	Hexachlorobutadiene	360	U
59-50-7-----	4-Chloro-3-Methylphenol	360	U
91-57-6-----	2-Methylnaphthalene	28	J
77-47-4-----	Hexachlorocyclopentadiene	360	U
88-06-2-----	2,4,6-Trichlorophenol	360	U
95-95-4-----	2,4,5-Trichlorophenol	910	U
91-58-7-----	2-Chloronaphthalene	360	U
88-74-4-----	2-Nitroaniline	910	U
131-11-3-----	Dimethyl Phthalate	360	U
208-96-8-----	Acenaphthylene	360	U
606-20-2-----	2,6-Dinitrotoluene	360	U
99-09-2-----	3-Nitroaniline	910	U
83-32-9-----	Acenaphthene	28	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF5RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012602RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL447

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	910	U
100-02-7-----	4-Nitrophenol	910	U
132-64-9-----	Dibenzofuran	22	J
121-14-2-----	2,4-Dinitrotoluene	360	U
84-66-2-----	Diethylphthalate	360	U
7005-72-3-----	4-Chlorophenyl-phenylether	360	U
86-73-7-----	Fluorene	20	J
100-01-6-----	4-Nitroaniline	910	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	910	U
86-30-6-----	N-Nitrosodiphenylamine (1)	360	U
101-55-3-----	4-Bromophenyl-phenylether	360	U
118-74-1-----	Hexachlorobenzene	360	U
87-86-5-----	Pentachlorophenol	910	U
85-01-8-----	Phenanthrene	530	
120-12-7-----	Anthracene	68	J
86-74-8-----	Carbazole	53	J
84-74-2-----	Di-n-Butylphthalate	43	J
206-44-0-----	Fluoranthene	640	
129-00-0-----	Pyrene	2600	
85-68-7-----	Butylbenzylphthalate	360	U
91-94-1-----	3,3'-Dichlorobenzidine	360	U
56-55-3-----	Benzo(a)Anthracene	650	
218-01-9-----	Chrysene	750	
117-81-7-----	bis(2-Ethylhexyl) Phthalate	91	J
117-84-0-----	Di-n-Octyl Phthalate	360	U
205-99-2-----	Benzo(b)Fluoranthene	890	
207-08-9-----	Benzo(k)Fluoranthene	670	
50-32-8-----	Benzo(a)Pyrene	880	
193-39-5-----	Indeno(1,2,3-cd) Pyrene	1100	
53-70-3-----	Dibenz(a,h)Anthracene	470	
191-24-2-----	Benzo(g,h,i)Perylene	1200	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF5RE

I Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012602RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL447

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 9 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CONCENTRATION UNITS:

Number TICs found: 11 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.62	170	J
2.	UNKNOWN	10.02	700	BJ V
3.	UNKNOWN	10.40	280	BJ V
4.	UNKNOWN	11.23	780	J
5.	UNKNOWN ALCOHOL	13.67	310	J
6.	UNKNOWN ACID	16.36	260	J
7.	UNKNOWN FLUOROBIPHENYL ISOME	16.62	300	J
8.	UNKNOWN MW204	17.35	250	J
9.	UNKNOWN ACID	19.60	170	J
10.	UNKNOWN	20.31	180	J
11.	UNKNOWN	20.41	2400	J

AV
5/25/95

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EABF6

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012603

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL389

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	400	U
111-44-4-----	bis(2-Chloroethyl) Ether	400	U
95-57-8-----	2-Chlorophenol	400	U
541-73-1-----	1,3-Dichlorobenzene	400	U
106-46-7-----	1,4-Dichlorobenzene	400	U
95-50-1-----	1,2-Dichlorobenzene	400	U
95-48-7-----	2-Methylphenol	400	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5-----	4-Methylphenol	400	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	400	U
67-72-1-----	Hexachloroethane	400	U
98-95-3-----	Nitrobenzene	400	U
78-59-1-----	Isophorone	400	U
88-75-5-----	2-Nitrophenol	400	U
105-67-9-----	2,4-Dimethylphenol	400	U
111-91-1-----	bis(2-Chloroethoxy) Methane	400	U
120-83-2-----	2,4-Dichlorophenol	400	U
120-82-1-----	1,2,4-Trichlorobenzene	400	U
91-20-3-----	Naphthalene	51	J
106-47-8-----	4-Chloroaniline	400	U
87-68-3-----	Hexachlorobutadiene	400	U
59-50-7-----	4-Chloro-3-Methylphenol	400	U
91-57-6-----	2-Methylnaphthalene	140	J
77-47-4-----	Hexachlorocyclopentadiene	400	U
88-06-2-----	2,4,6-Trichlorophenol	400	U
95-95-4-----	2,4,5-Trichlorophenol	1000	U
91-58-7-----	2-Chloronaphthalene	400	U
88-74-4-----	2-Nitroaniline	1000	U
131-11-3-----	Dimethyl Phthalate	400	U
208-96-8-----	Acenaphthylene	400	U
606-20-2-----	2,6-Dinitrotoluene	400	U
99-09-2-----	3-Nitroaniline	1000	U
83-32-9-----	Acenaphthene	400	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF6

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012603

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL389

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	78	J
121-14-2-----	2,4-Dinitrotoluene	400	U
84-66-2-----	Diethylphthalate	25	J
7005-72-3-----	4-Chlorophenyl-phenylether	400	U
86-73-7-----	Fluorene	400	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	21	J
101-55-3-----	4-Bromophenyl-phenylether	400	U
118-74-1-----	Hexachlorobenzene	400	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	560	
120-12-7-----	Anthracene	52	J
86-74-8-----	Carbazole	35	J
84-74-2-----	Di-n-Butylphthalate	50	J
206-44-0-----	Fluoranthene	360	J
129-00-0-----	Pyrene	350	J
85-68-7-----	Butylbenzylphthalate	400	U
91-94-1-----	3,3'-Dichlorobenzidine	400	U
56-55-3-----	Benzo(a)Anthracene	170	J
218-01-9-----	Chrysene	240	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	52	J
117-84-0-----	Di-n-Octyl Phthalate	400	U
205-99-2-----	Benzo(b)Fluoranthene	190	J
207-08-9-----	Benzo(k)Fluoranthene	220	J
50-32-8-----	Benzo(a)Pyrene	130	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	400	U
53-70-3-----	Dibenz(a,h) Anthracene	400	U
191-24-2-----	Benzo(g,h,i) Perylene	400	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF6

I Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012603	
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL389	
Level: (low/med) LOW	Date Received: 05/05/95	
% Moisture: 18 decanted: (Y/N) N	Date Extracted: 05/06/95	
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/13/95	
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) Y	pH: 5.9	

CONCENTRATION UNITS:
Number TICs found: 25 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.65	190	J
2.	UNKNOWN	9.93	150	J
3.	UNKNOWN	10.07	1000	BJL
4.	UNKNOWN	10.46	300	BJL
5.	UNKNOWN	11.03	97	J
6.	UNKNOWN	11.31	1200	J
7.	UNKNOWN	12.01	90	J
8.	UNKNOWN ALCOHOL	13.78	370	J
9. 90120	Naphthalene, 1-methyl-	16.14	85	JN
10.	UNKNOWN	16.51	430	J
11.	UNKNOWN FLUOROBIPHENYL ISOME	16.78	430	J
12.	UNKNOWN DIMETHYLNAPHTHALENE	17.51	95	J
13.	UNKNOWN DIMETHYLNAPHTHALENE	17.72	580	J
14.	UNKNOWN	19.09	180	J
15.	UNKNOWN TRIMETHYLNAPHTHALENE	19.30	120	J
16.	UNKNOWN TRIMETHYLNAPHTHALENE	19.55	450	J
17.	UNKNOWN TRIMETHYLNAPHTHALENE	20.17	410	J
18. 7320538	Dibenzofuran, 4-methyl-	20.59	150	JN
19.	UNKNOWN	22.60	160	J
20.	UNKNOWN	23.20	340	J
21.	UNKNOWN	23.74	220	J
22. 57103	Hexadecanoic acid	23.81	490	JN
23.	UNKNOWN PNA MW192	24.39	120	J
24.	UNKNOWN AROMATIC	27.27	1300	J
25.	UNKNOWN	28.46	980	J

AV
5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF6RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012603RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL403

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND			
108-95-2-----	Phenol	400	U	
111-44-4-----	bis(2-Chloroethyl) Ether	400	U	
95-57-8-----	2-Chlorophenol	400	U	
541-73-1-----	1,3-Dichlorobenzene	400	U	
106-46-7-----	1,4-Dichlorobenzene	400	U	
95-50-1-----	1,2-Dichlorobenzene	400	U	
95-48-7-----	2-Methylphenol	400	U	
108-60-1-----	2,2'-oxybis(1-Chloropropane)	400	U	
106-44-5-----	4-Methylphenol	400	U	
621-64-7-----	N-Nitroso-Di-n-Propylamine	400	U	
67-72-1-----	Hexachloroethane	400	U	
98-95-3-----	Nitrobenzene	400	U	
78-59-1-----	Isophorone	400	U	
88-75-5-----	2-Nitrophenol	400	U	
105-67-9-----	2,4-Dimethylphenol	400	U	
111-91-1-----	bis(2-Chloroethoxy) Methane	400	U	
120-83-2-----	2,4-Dichlorophenol	400	U	
120-82-1-----	1,2,4-Trichlorobenzene	400	U	
91-20-3-----	Naphthalene	51	J	
106-47-8-----	4-Chloroaniline	400	U	
87-68-3-----	Hexachlorobutadiene	400	U	
59-50-7-----	4-Chloro-3-Methylphenol	400	U	
91-57-6-----	2-Methylnaphthalene	140	J	
77-47-4-----	Hexachlorocyclopentadiene	400	U	
88-06-2-----	2,4,6-Trichlorophenol	400	U	
95-95-4-----	2,4,5-Trichlorophenol	1000	U	
91-58-7-----	2-Chloronaphthalene	400	U	
88-74-4-----	2-Nitroaniline	1000	U	
131-11-3-----	Dimethyl Phthalate	400	U	
208-96-8-----	Acenaphthylene	400	U	
606-20-2-----	2,6-Dinitrotoluene	400	U	
99-09-2-----	3-Nitroaniline	1000	U	
83-32-9-----	Acenaphthene	400	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF6RE

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012603RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL403

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 18 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	82	J
121-14-2-----	2,4-Dinitrotoluene	400	U
84-66-2-----	Diethylphthalate	400	U
7005-72-3-----	4-Chlorophenyl-phenylether	400	U
86-73-7-----	Fluorene	400	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	400	U
101-55-3-----	4-Bromophenyl-phenylether	400	U
118-74-1-----	Hexachlorobenzene	400	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	560	
120-12-7-----	Anthracene	38	J
86-74-8-----	Carbazole	34	J
84-74-2-----	Di-n-Butylphthalate	45	J
206-44-0-----	Fluoranthene	330	J
129-00-0-----	Pyrene	440	
85-68-7-----	Butylbenzylphthalate	400	U
91-94-1-----	3,3'-Dichlorobenzidine	400	U
56-55-3-----	Benzo(a)Anthracene	170	J
218-01-9-----	Chrysene	240	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	59	J
117-84-0-----	Di-n-Octyl Phthalate	400	U
205-99-2-----	Benzo(b)Fluoranthene	150	J
207-08-9-----	Benzo(k)Fluoranthene	220	J
50-32-8-----	Benzo(a)Pyrene	160	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	150	J
53-70-3-----	Dibenz(a,h)Anthracene	400	U
191-24-2-----	Benzo(g,h,i)Perylene	400	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF6RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012603RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL403

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 18 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 5.9

CONCENTRATION UNITS:
Number TICs found: 30 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.55	150	J
2.	UNKNOWN	9.85	110	J
3.	UNKNOWN	9.99	880	BJ
4.	UNKNOWN	10.38	250	BJ
5.	UNKNOWN	11.24	1100	J
6.	UNKNOWN	13.38	88	J
7.	UNKNOWN ALCOHOL	13.72	370	J
8. 90120	Naphthalene, 1-methyl-	16.09	100	JN
9.	UNKNOWN	16.45	290	J
10.	UNKNOWN FLUOROBIPHENYL MW172	16.71	240	J
11.	UNKNOWN DIMETHYLNAPHTHALENE	17.45	98	J
12.	UNKNOWN DIMETHYLNAPHTHALENE	17.67	570	J
13.	UNKNOWN DIMETHYLNAPHTHALENE	17.75	130	J
14.	UNKNOWN DIMETHYLNAPHTHALENE	18.00	110	J
15.	UNKNOWN DIMETHYLNAPHTHALENE	18.26	120	J
16.	UNKNOWN	19.05	160	J
17.	UNKNOWN TRIMETHYLNAPHTHALENE	19.24	110	J
18.	UNKNOWN TRIMETHYLNAPHTHALENE	19.49	440	J
19.	UNKNOWN TRIMETHYLNAPHTHALENE	19.72	280	J
20.	UNKNOWN TRIMETHYLNAPHTHALENE	20.12	360	J
21. 7320538	Dibenzofuran, 4-methyl-	20.54	140	JN
22.	UNKNOWN	22.54	110	J
23.	UNKNOWN	23.15	310	J
24.	UNKNOWN	23.69	160	J
25. 57103	Hexadecanoic acid	23.76	400	JN
26.	UNKNOWN PNA MW192	24.34	140	J
27.	UNKNOWN AROMATIC	27.22	340	J
28.	UNKNOWN	28.41	280	J
29.	UNKNOWN COLUMN BLEED	35.62	500	J
30.	UNKNOWN COLUMN BLEED	39.66	810	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7

1 Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012604	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL390
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture:	22	decanted: (Y/N)	N
Concentrated Extract Volume: 500.0 (uL)		Date Extracted: 05/06/95	
Injection Volume:	2.0 (uL)	Date Analyzed: 05/13/95	
GPC Cleanup: (Y/N)	Y	pH:	6.8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	420	U
111-44-4-----	bis(2-Chloroethyl) Ether	420	U
95-57-8-----	2-Chlorophenol	420	U
541-73-1-----	1,3-Dichlorobenzene	420	U
106-46-7-----	1,4-Dichlorobenzene	420	U
95-50-1-----	1,2-Dichlorobenzene	420	U
95-48-7-----	2-Methylphenol	420	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	420	U
106-44-5-----	4-Methylphenol	420	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	420	U
67-72-1-----	Hexachloroethane	420	U
98-95-3-----	Nitrobenzene	420	U
78-59-1-----	Isophorone	420	U
88-75-5-----	2-Nitrophenol	420	U
105-67-9-----	2,4-Dimethylphenol	420	U
111-91-1-----	bis(2-Chloroethoxy) Methane	420	U
120-83-2-----	2,4-Dichlorophenol	420	U
120-82-1-----	1,2,4-Trichlorobenzene	420	U
91-20-3-----	Naphthalene	420	U
106-47-8-----	4-Chloroaniline	420	U
87-68-3-----	Hexachlorobutadiene	420	U
59-50-7-----	4-Chloro-3-Methylphenol	420	U
91-57-6-----	2-Methylnaphthalene	420	U
77-47-4-----	Hexachlorocyclopentadiene	420	U
88-06-2-----	2,4,6-Trichlorophenol	420	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	420	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	420	U
208-96-8-----	Acenaphthylene	420	U
606-20-2-----	2,6-Dinitrotoluene	420	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	420	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012604

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL390

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 22 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	420	U
121-14-2-----	2,4-Dinitrotoluene	420	U
84-66-2-----	Diethylphthalate	24	J
7005-72-3-----	4-Chlorophenyl-phenylether	420	U
86-73-7-----	Fluorene	420	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	420	U
101-55-3-----	4-Bromophenyl-phenylether	420	U
118-74-1-----	Hexachlorobenzene	420	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	180	J
120-12-7-----	Anthracene	420	U
86-74-8-----	Carbazole	420	U
84-74-2-----	Di-n-Butylphthalate	50	J
206-44-0-----	Fluoranthene	400	J
129-00-0-----	Pyrene	230	J
85-68-7-----	Butylbenzylphthalate	420	U
91-94-1-----	3,3'-Dichlorobenzidine	420	U
56-55-3-----	Benzo(a)Anthracene	160	J
218-01-9-----	Chrysene	210	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	94	J
117-84-0-----	Di-n-Octyl Phthalate	420	U
205-99-2-----	Benzo(b)Fluoranthene	230	J
207-08-9-----	Benzo(k)Fluoranthene	200	J
50-32-8-----	Benzo(a)Pyrene	180	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	73	J
53-70-3-----	Dibenz(a,h)Anthracene	420	U
191-24-2-----	Benzo(g,h,i)Perylene	63	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF7

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012604	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL390
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	22 decanted: (Y/N) N	Date Extracted:	05/06/95
Concentrated Extract Volume: 500.0 (uL)		Date Analyzed:	05/13/95
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0
GPC Cleanup: (Y/N) Y	pH: 6.8		

CONCENTRATION UNITS:

Number TICs found: 28 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.07	860	BJV
2.	UNKNOWN	10.45	360	BJV
3.	UNKNOWN	11.30	910	J
4.	UNKNOWN	13.44	91	J
5.	UNKNOWN ALCOHOL	13.77	350	J
6.	UNKNOWN ACID	16.51	120	J
7.	UNKNOWN	23.74	160	J
8. 57103	Hexadecanoic acid	23.81	420	JN
9.	UNKNOWN CHLORDANE ISOMER	24.87	2000	J
10.	UNKNOWN	25.03	120	J
11.	UNKNOWN	25.58	180	J
12. 1024573	Heptachlor epoxide	25.79	400	JN
13.	UNKNOWN	26.17	310	J
14.	UNKNOWN CHLORDANE ISOMER	26.31	2000	J
15.	UNKNOWN	26.44	290	J
16.	UNKNOWN	27.10	210	J
17.	UNKNOWN	27.44	290	J
18.	UNKNOWN	27.68	130	J
19.	UNKNOWN	28.05	210	J
20.	UNKNOWN	28.13	160	J
21.	UNKNOWN	28.37	930	J
22.	UNKNOWN	28.89	670	J
23.	UNKNOWN	29.23	94	J
24.	UNKNOWN	30.72	110	J
25.	UNKNOWN ALCOHOL	33.00	840	J
26.	UNKNOWN COLUMN BLEED	42.03	1000	J
27.	UNKNOWN COLUMN BLEED	42.68	1200	J
28.	UNKNOWN COLUMN BLEED	43.48	690	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012604RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL404

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	420	U
111-44-4-----	bis(2-Chloroethyl) Ether	420	U
95-57-8-----	2-Chlorophenol	420	U
541-73-1-----	1,3-Dichlorobenzene	420	U
106-46-7-----	1,4-Dichlorobenzene	420	U
95-50-1-----	1,2-Dichlorobenzene	420	U
95-48-7-----	2-Methylphenol	420	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	420	U
106-44-5-----	4-Methylphenol	420	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	420	U
67-72-1-----	Hexachloroethane	420	U
98-95-3-----	Nitrobenzene	420	U
78-59-1-----	Isophorone	420	U
88-75-5-----	2-Nitrophenol	420	U
105-67-9-----	2,4-Dimethylphenol	420	U
111-91-1-----	bis(2-Chloroethoxy) Methane	420	U
120-83-2-----	2,4-Dichlorophenol	420	U
120-82-1-----	1,2,4-Trichlorobenzene	420	U
91-20-3-----	Naphthalene	420	U
106-47-8-----	4-Chloroaniline	420	U
87-68-3-----	Hexachlorobutadiene	420	U
59-50-7-----	4-Chloro-3-Methylphenol	420	U
91-57-6-----	2-Methylnaphthalene	420	U
77-47-4-----	Hexachlorocyclopentadiene	420	U
88-06-2-----	2,4,6-Trichlorophenol	420	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	420	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	420	U
208-96-8-----	Acenaphthylene	420	U
606-20-2-----	2,6-Dinitrotoluene	420	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	420	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7RE

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012604RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL404

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 22 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	420	U
121-14-2-----	2,4-Dinitrotoluene	420	U
84-66-2-----	Diethylphthalate	25	J
7005-72-3-----	4-Chlorophenyl-phenylether	420	U
86-73-7-----	Fluorene	420	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	420	U
101-55-3-----	4-Bromophenyl-phenylether	420	U
118-74-1-----	Hexachlorobenzene	420	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	170	J
120-12-7-----	Anthracene	23	J
86-74-8-----	Carbazole	420	U
84-74-2-----	Di-n-Butylphthalate	40	J
206-44-0-----	Fluoranthene	320	J
129-00-0-----	Pyrene	330	J
85-68-7-----	Butylbenzylphthalate	420	U
91-94-1-----	3,3'-Dichlorobenzidine	420	U
56-55-3-----	Benzo(a)Anthracene	160	J
218-01-9-----	Chrysene	200	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	81	J
117-84-0-----	Di-n-Octyl Phthalate	420	U
205-99-2-----	Benzo(b)Fluoranthene	220	J
207-08-9-----	Benzo(k)Fluoranthene	180	J
50-32-8-----	Benzo(a)Pyrene	180	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	120	J
53-70-3-----	Dibenz(a,h)Anthracene	420	U
191-24-2-----	Benzo(g,h,i)Perylene	140	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF7RE

Lab Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012604RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL404

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 22 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.8

CONCENTRATION UNITS:
Number TICs found: 25 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	770	BJV
2.	UNKNOWN	10.37	320	BJV
3.	UNKNOWN	11.23	1000	J
4.	UNKNOWN	13.38	160	J
5.	UNKNOWN ALCOHOL	13.72	330	J
6.	UNKNOWN ACID	16.46	100	J
7.	UNKNOWN	23.63	150	J
8.	UNKNOWN	23.69	210	J
9. 57103	Hexadecanoic acid	23.76	490	JN
10.	UNKNOWN CHLORDANE ISOMER	24.82	2200	J
11.	UNKNOWN	24.99	120	J
12.	UNKNOWN	25.46	95	J
13.	UNKNOWN	25.53	200	J
14. 1024573	Heptachlor epoxide	25.74	620	JN
15.	UNKNOWN	26.11	320	J
16.	UNKNOWN CHLORDANE ISOMER	26.27	1500	J
17.	UNKNOWN	26.39	220	J
18.	UNKNOWN	27.05	200	J
19.	UNKNOWN	27.64	130	J
20.	UNKNOWN	28.00	160	J
21.	UNKNOWN	28.32	880	J
22.	UNKNOWN	28.84	540	J
23.	UNKNOWN COLUMN BLEED	39.59	270	J
24.	UNKNOWN COLUMN BLEED	41.81	810	J
25.	UNKNOWN COLUMN BLEED	42.52	700	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012605

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL388

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 17 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-95-2-----	Phenol	400	U
111-44-4-----	bis(2-Chloroethyl)Ether	400	U
95-57-8-----	2-Chlorophenol	400	U
541-73-1-----	1,3-Dichlorobenzene	400	U
106-46-7-----	1,4-Dichlorobenzene	400	U
95-50-1-----	1,2-Dichlorobenzene	400	U
95-48-7-----	2-Methylphenol	400	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5-----	4-Methylphenol	400	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	400	U
67-72-1-----	Hexachloroethane	400	U
98-95-3-----	Nitrobenzene	400	U
78-59-1-----	Isophorone	400	U
88-75-5-----	2-Nitrophenol	400	U
105-67-9-----	2,4-Dimethylphenol	400	U
111-91-1-----	bis(2-Chloroethoxy)Methane	400	U
120-83-2-----	2,4-Dichlorophenol	400	U
120-82-1-----	1,2,4-Trichlorobenzene	400	U
91-20-3-----	Naphthalene	400	U
106-47-8-----	4-Chloroaniline	400	U
87-68-3-----	Hexachlorobutadiene	400	U
59-50-7-----	4-Chloro-3-Methylphenol	400	U
91-57-6-----	2-Methylnaphthalene	400	U
77-47-4-----	Hexachlorocyclopentadiene	400	U
88-06-2-----	2,4,6-Trichlorophenol	400	U
95-95-4-----	2,4,5-Trichlorophenol	1000	U
91-58-7-----	2-Chloronaphthalene	400	U
88-74-4-----	2-Nitroaniline	1000	U
131-11-3-----	Dimethyl Phthalate	400	U
208-96-8-----	Acenaphthylene	400	U
606-20-2-----	2,6-Dinitrotoluene	400	U
99-09-2-----	3-Nitroaniline	1000	U
83-32-9-----	Acenaphthene	400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8

L Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012605
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL388
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	17	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/13/95
GPC Cleanup:	(Y/N) Y	pH:	7.4
Dilution Factor:			1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	400	U
121-14-2-----	2,4-Dinitrotoluene	400	U
84-66-2-----	Diethylphthalate	30	J
7005-72-3-----	4-Chlorophenyl-phenylether	400	U
86-73-7-----	Fluorene	400	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	400	U
101-55-3-----	4-Bromophenyl-phenylether	400	U
118-74-1-----	Hexachlorobenzene	400	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	140	J
120-12-7-----	Anthracene	23	J
86-74-8-----	Carbazole	400	U
84-74-2-----	Di-n-Butylphthalate	48	J
206-44-0-----	Fluoranthene	290	J
129-00-0-----	Pyrene	170	J
85-68-7-----	Butylbenzylphthalate	61	J
91-94-1-----	3,3'-Dichlorobenzidine	400	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	150	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	1900	
117-84-0-----	Di-n-Octyl Phthalate	570	
205-99-2-----	Benzo(b)Fluoranthene	130	J
207-08-9-----	Benzo(k)Fluoranthene	160	J
50-32-8-----	Benzo(a)Pyrene	89	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	400	U
53-70-3-----	Dibenz(a,h)Anthracene	400	U
191-24-2-----	Benzo(g,h,i)Perylene	400	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name:	RECRA ENVIRON	Contract:	68D50010	EABF8
Lab Code:	RECMD	Case No.:	23525	SAS No.:
Matrix: (soil/water) SOIL			Lab Sample ID: B5012605	
Sample wt/vol: 30.0 (g/mL) G			Lab File ID: DL388	
Level: (low/med) LOW			Date Received: 05/05/95	
% Moisture: 17 decanted: (Y/N) N			Date Extracted: 05/06/95	
Concentrated Extract Volume: 500.0 (uL)			Date Analyzed: 05/13/95	
Injection Volume: 2.0 (uL)			Dilution Factor: 1.0	
GPC Cleanup: (Y/N) Y			pH: 7.4	

CONCENTRATION UNITS:
Number TICs found: 20 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.95	300	J
2.	UNKNOWN	10.08	410	BJV
3.	UNKNOWN	10.45	150	BJV
4.	UNKNOWN	11.00	100	J
5.	UNKNOWN	11.28	220	J
6.	UNKNOWN	12.04	91	J
7.	UNKNOWN	12.89	170	J
8.	UNKNOWN ALCOHOL	13.78	430	J
9.	UNKNOWN ACID	16.52	160	J
10.	UNKNOWN	16.76	390	J
11.	UNKNOWN	19.75	87	J
12. 57103	Hexadecanoic acid	23.80	380	JN
13. 57114	Octadecanoic acid	25.85	85	JN
14.	UNKNOWN	28.89	950	J
15.	UNKNOWN	29.22	88	J
16.	UNKNOWN BENZENEDICARBOXYLIC	30.61	280	J
17.	UNKNOWN BENZENEDICARBOXYLIC	30.72	230	J
18.	UNKNOWN	31.64	85	J
19.	UNKNOWN	32.27	310	J
20.	UNKNOWN ALCOHOL	33.00	1200	J

AV
7-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8RE

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012605RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL402		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	17	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/15/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.4		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	400	U
111-44-4-----	bis(2-Chloroethyl) Ether	400	U
95-57-8-----	2-Chlorophenol	400	U
541-73-1-----	1,3-Dichlorobenzene	400	U
106-46-7-----	1,4-Dichlorobenzene	400	U
95-50-1-----	1,2-Dichlorobenzene	400	U
95-48-7-----	2-Methylphenol	400	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	400	U
106-44-5-----	4-Methylphenol	400	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	400	U
67-72-1-----	Hexachloroethane	400	U
98-95-3-----	Nitrobenzene	400	U
78-59-1-----	Isophorone	400	U
88-75-5-----	2-Nitrophenol	400	U
105-67-9-----	2,4-Dimethylphenol	400	U
111-91-1-----	bis(2-Chloroethoxy) Methane	400	U
120-83-2-----	2,4-Dichlorophenol	400	U
120-82-1-----	1,2,4-Trichlorobenzene	400	U
91-20-3-----	Naphthalene	400	U
106-47-8-----	4-Chloroaniline	400	U
87-68-3-----	Hexachlorobutadiene	400	U
59-50-7-----	4-Chloro-3-Methylphenol	400	U
91-57-6-----	2-Methylnaphthalene	400	U
77-47-4-----	Hexachlorocyclopentadiene	400	U
88-06-2-----	2,4,6-Trichlorophenol	400	U
95-95-4-----	2,4,5-Trichlorophenol	1000	U
91-58-7-----	2-Chloronaphthalene	400	U
88-74-4-----	2-Nitroaniline	1000	U
131-11-3-----	Dimethyl Phthalate	400	U
208-96-8-----	Acenaphthylene	400	U
606-20-2-----	2,6-Dinitrotoluene	400	U
99-09-2-----	3-Nitroaniline	1000	U
83-32-9-----	Acenaphthene	400	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8RE

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012605RI		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL402		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 17 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/15/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N) Y	pH: 7.4	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1000	U
100-02-7-----	4-Nitrophenol	1000	U
132-64-9-----	Dibenzofuran	400	U
121-14-2-----	2,4-Dinitrotoluene	400	U
84-66-2-----	Diethylphthalate	28	J
7005-72-3-----	4-Chlorophenyl-phenylether	400	U
86-73-7-----	Fluorene	400	U
100-01-6-----	4-Nitroaniline	1000	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1000	U
86-30-6-----	N-Nitrosodiphenylamine (1)	400	U
101-55-3-----	4-Bromophenyl-phenylether	400	U
118-74-1-----	Hexachlorobenzene	400	U
87-86-5-----	Pentachlorophenol	1000	U
85-01-8-----	Phenanthrene	140	J
120-12-7-----	Anthracene	21	J
86-74-8-----	Carbazole	400	U
84-74-2-----	Di-n-Butylphthalate	43	J
206-44-0-----	Fluoranthene	260	J
129-00-0-----	Pyrene	290	J
85-68-7-----	Butylbenzylphthalate	57	J
91-94-1-----	3,3'-Dichlorobenzidine	400	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	160	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	1700	
117-84-0-----	Di-n-Octyl Phthalate	440	
205-99-2-----	Benzo(b)Fluoranthene	170	J
207-08-9-----	Benzo(k)Fluoranthene	150	J
50-32-8-----	Benzo(a)Pyrene	130	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	400	U
53-70-3-----	Dibenz(a,h)Anthracene	400	U
191-24-2-----	Benzo(g,h,i)Perylene	400	U

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012605RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL402

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 17 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.4

CONCENTRATION UNITS:

Number TICs found: 12 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.86	330	J
2.	UNKNOWN	9.99	380	BJL
3.	UNKNOWN	10.37	150	BJL
4.	UNKNOWN	10.97	110	J
5.	UNKNOWN	11.21	230	J
6.	UNKNOWN	11.96	110	J
7.	UNKNOWN	12.80	200	J
8.	UNKNOWN ALCOHOL	13.72	390	J
9.	UNKNOWN ACID	16.47	170	J
10. 57103	Hexadecanoic acid	23.76	310	JN
11.	UNKNOWN	28.84	620	J
12.	UNKNOWN COLUMN BLEED	35.62	530	J

AI
5/15/95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012606		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL407		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 25 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/15/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N) Y	pH: 7.0		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	440	U
111-44-4-----	bis(2-Chloroethyl)Ether	440	U
95-57-8-----	2-Chlorophenol	440	U
541-73-1-----	1,3-Dichlorobenzene	440	U
106-46-7-----	1,4-Dichlorobenzene	440	U
95-50-1-----	1,2-Dichlorobenzene	440	U
95-48-7-----	2-Methylphenol	440	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	440	U
106-44-5-----	4-Methylphenol	440	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	440	U
67-72-1-----	Hexachloroethane	440	U
98-95-3-----	Nitrobenzene	440	U
78-59-1-----	Isophorone	440	U
88-75-5-----	2-Nitrophenol	440	U
105-67-9-----	2,4-Dimethylphenol	440	U
111-91-1-----	bis(2-Chloroethoxy)Methane	440	U
120-83-2-----	2,4-Dichlorophenol	440	U
120-82-1-----	1,2,4-Trichlorobenzene	440	U
91-20-3-----	Naphthalene	440	U
106-47-8-----	4-Chloroaniline	440	U
87-68-3-----	Hexachlorobutadiene	440	U
59-50-7-----	4-Chloro-3-Methylphenol	440	U
91-57-6-----	2-Methylnaphthalene	440	U
77-47-4-----	Hexachlorocyclopentadiene	440	U
88-06-2-----	2,4,6-Trichlorophenol	440	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	440	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	440	U
208-96-8-----	Acenaphthylene	440	U
606-20-2-----	2,6-Dinitrotoluene	440	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	440	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9

L Name: RECRA ENVIRON Contract: 68D50010
 Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5
 Matrix: (soil/water) SOIL Lab Sample ID: B5012606
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL407
 Level: (low/med) LOW Date Received: 05/05/95
 % Moisture: 25 decanted: (Y/N) N Date Extracted: 05/06/95
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	440	U
121-14-2-----	2,4-Dinitrotoluene	440	U
84-66-2-----	Diethylphthalate	27	J
7005-72-3-----	4-Chlorophenyl-phenylether	440	U
86-73-7-----	Fluorene	440	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	440	U
101-55-3-----	4-Bromophenyl-phenylether	440	U
118-74-1-----	Hexachlorobenzene	81	J
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	120	J
120-12-7-----	Anthracene	440	U
86-74-8-----	Carbazole	440	U
84-74-2-----	Di-n-Butylphthalate	54	J
206-44-0-----	Fluoranthene	250	J
129-00-0-----	Pyrene	390	J
85-68-7-----	Butylbenzylphthalate	140	J
91-94-1-----	3,3'-Dichlorobenzidine	440	U
56-55-3-----	Benzo(a)Anthracene	130	J
218-01-9-----	Chrysene	170	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	540	
117-84-0-----	Di-n-Octyl Phthalate	440	U
205-99-2-----	Benzo(b)Fluoranthene	150	J
207-08-9-----	Benzo(k)Fluoranthene	180	J
50-32-8-----	Benzo(a)Pyrene	140	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	130	J
53-70-3-----	Dibenz(a,h)Anthracene	440	U
191-24-2-----	Benzo(g,h,i)Perylene	180	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

L Name: RECRA ENVIRON	Contract: 68D50010	EABF9
Lab Code: RECMD	Case No.: 23525	SAS No.:
Matrix: (soil/water) SOIL		Lab Sample ID: B5012606
Sample wt/vol: 30.0 (g/mL) G		Lab File ID: DL407
Level: (low/med) LOW		Date Received: 05/05/95
% Moisture: 25 decanted: (Y/N) N		Date Extracted: 05/06/95
Concentrated Extract Volume: 500.0 (uL)		Date Analyzed: 05/15/95
Injection Volume: 2.0 (uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 7.0	

CONCENTRATION UNITS:
Number TICs found: 9 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	940	BJ V
2.	UNKNOWN	10.37	340	BJ V
3.	UNKNOWN	11.24	770	J
4.	UNKNOWN	13.38	150	J
5.	UNKNOWN ALCOHOL	13.72	340	J
6.	UNKNOWN	23.61	94	J
7. 57103	Hexadecanoic acid	23.76	340	JN
8.	UNKNOWN CHLORDANE ISOMER	24.81	520	J
9.	UNKNOWN	26.24	120	J

AV
5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9RE

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012606RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL429

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 25 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
108-95-2-----	Phenol	440	U	
111-44-4-----	bis(2-Chloroethyl)Ether	440	U	
95-57-8-----	2-Chlorophenol	440	U	
541-73-1-----	1,3-Dichlorobenzene	440	U	
106-46-7-----	1,4-Dichlorobenzene	440	U	
95-50-1-----	1,2-Dichlorobenzene	440	U	
95-48-7-----	2-Methylphenol	440	U	
108-60-1-----	2,2'-oxybis(1-Chloropropane)	440	U	
106-44-5-----	4-Methylphenol	440	U	
621-64-7-----	N-Nitroso-Di-n-Propylamine	440	U	
67-72-1-----	Hexachloroethane	440	U	
98-95-3-----	Nitrobenzene	440	U	
78-59-1-----	Isophorone	440	U	
88-75-5-----	2-Nitrophenol	440	U	
105-67-9-----	2,4-Dimethylphenol	440	U	
111-91-1-----	bis(2-Chloroethoxy)Methane	440	U	
120-83-2-----	2,4-Dichlorophenol	440	U	
120-82-1-----	1,2,4-Trichlorobenzene	440	U	
91-20-3-----	Naphthalene	440	U	
106-47-8-----	4-Chloroaniline	440	U	
87-68-3-----	Hexachlorobutadiene	440	U	
59-50-7-----	4-Chloro-3-Methylphenol	440	U	
91-57-6-----	2-Methylnaphthalene	440	U	
77-47-4-----	Hexachlorocyclopentadiene	440	U	
88-06-2-----	2,4,6-Trichlorophenol	440	U	
95-95-4-----	2,4,5-Trichlorophenol	1100	U	
91-58-7-----	2-Chloronaphthalene	440	U	
88-74-4-----	2-Nitroaniline	1100	U	
131-11-3-----	Dimethyl Phthalate	440	U	
208-96-8-----	Acenaphthylene	440	U	
606-20-2-----	2,6-Dinitrotoluene	440	U	
99-09-2-----	3-Nitroaniline	1100	U	
83-32-9-----	Acenaphthene	440	U	

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9RE

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012606RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL429

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 25 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	440	U
121-14-2-----	2,4-Dinitrotoluene	440	U
84-66-2-----	Diethylphthalate	30	J
7005-72-3-----	4-Chlorophenyl-phenylether	440	U
86-73-7-----	Fluorene	440	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	440	U
101-55-3-----	4-Bromophenyl-phenylether	440	U
118-74-1-----	Hexachlorobenzene	74	J
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	120	J
120-12-7-----	Anthracene	440	U
86-74-8-----	Carbazole	440	U
84-74-2-----	Di-n-Butylphthalate	58	J
206-44-0-----	Fluoranthene	260	J
129-00-0-----	Pyrene	320	J
85-68-7-----	Butylbenzylphthalate	440	U
91-94-1-----	3,3'-Dichlorobenzidine	440	U
56-55-3-----	Benzo(a)Anthracene	120	J
218-01-9-----	Chrysene	180	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	490	
117-84-0-----	Di-n-Octyl Phthalate	440	U
205-99-2-----	Benzo(b)Fluoranthene	160	J
207-08-9-----	Benzo(k)Fluoranthene	220	J
50-32-8-----	Benzo(a)Pyrene	140	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	200	J
53-70-3-----	Dibenzo(a,h) Anthracene	440	U
191-24-2-----	Benzo(g,h,i) Perylene	220	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABF9RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012606RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL429

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0

CONCENTRATION UNITS:

Number TICs found: 8 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.84	930	BJ L
2.	UNKNOWN	10.19	250	BJ L
3.	UNKNOWN	11.08	910	J
4.	UNKNOWN	13.28	130	J
5.	UNKNOWN ALCOHOL	13.62	330	J
6. 57103	Hexadecanoic acid	23.68	190	JN
7.	UNKNOWN CHLORDANE ISOMER	24.73	420	J
8.	UNKNOWN COLUMN BLEED	39.42	1100	J

A1

5-15-95

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABG1

Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012618	
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL386	
Level: (low/med) LOW	Date Received: 05/05/95	
% Moisture: 13 decanted: (Y/N) N	Date Extracted: 05/06/95	
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/13/95	
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0	
GPC Cleanup: (Y/N) Y	pH: 8.3	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q
CAS NO.	COMPOUND	
108-95-2-----Phenol	380	U
111-44-4-----bis(2-Chloroethyl)Ether	380	U
95-57-8-----2-Chlorophenol	380	U
541-73-1-----1,3-Dichlorobenzene	380	U
106-46-7-----1,4-Dichlorobenzene	380	U
95-50-1-----1,2-Dichlorobenzene	380	U
95-48-7-----2-Methylphenol	380	U
108-60-1-----2,2'-oxybis(1-Chloropropane)	380	U
106-44-5-----4-Methylphenol	380	U
621-64-7-----N-Nitroso-Di-n-Propylamine	380	U
67-72-1-----Hexachloroethane	380	U
98-95-3-----Nitrobenzene	380	U
78-59-1-----Isophorone	380	U
88-75-5-----2-Nitrophenol	380	U
105-67-9-----2,4-Dimethylphenol	380	U
111-91-1-----bis(2-Chloroethoxy)Methane	380	U
120-83-2-----2,4-Dichlorophenol	380	U
120-82-1-----1,2,4-Trichlorobenzene	380	U
91-20-3-----Naphthalene	380	U
106-47-8-----4-Chloroaniline	380	U
87-68-3-----Hexachlorobutadiene	380	U
59-50-7-----4-Chloro-3-Methylphenol	380	U
91-57-6-----2-Methylnaphthalene	380	U
77-47-4-----Hexachlorocyclopentadiene	380	U
88-06-2-----2,4,6-Trichlorophenol	380	U
95-95-4-----2,4,5-Trichlorophenol	950	U
91-58-7-----2-Chloronaphthalene	380	U
88-74-4-----2-Nitroaniline	950	U
131-11-3-----Dimethyl Phthalate	380	U
208-96-8-----Acenaphthylene	380	U
606-20-2-----2,6-Dinitrotoluene	380	U
99-09-2-----3-Nitroaniline	950	U
83-32-9-----Acenaphthene	380	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABG1

Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012618

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL386

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 13 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	950	U
100-02-7-----	4-Nitrophenol	950	U
132-64-9-----	Dibenzofuran	380	U
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	380	U
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	380	U
100-01-6-----	4-Nitroaniline	950	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	950	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	950	U
85-01-8-----	Phenanthrene	21	J
120-12-7-----	Anthracene	380	U
86-74-8-----	Carbazole	380	U
84-74-2-----	Di-n-Butylphthalate	380	U
206-44-0-----	Fluoranthene	41	J
129-00-0-----	Pyrene	23	J
85-68-7-----	Butylbenzylphthalate	380	U
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)Anthracene	22	J
218-01-9-----	Chrysene	31	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	20	J
117-84-0-----	Di-n-Octyl Phthalate	380	U
205-99-2-----	Benzo(b)Fluoranthene	380	U
207-08-9-----	Benzo(k)Fluoranthene	380	U
50-32-8-----	Benzo(a)Pyrene	380	U
193-39-5-----	Indeno(1,2,3-cd)Pyrene	380	U
53-70-3-----	Dibenz(a,h)Anthracene	380	U
191-24-2-----	Benzo(g,h,i)Perylene	380	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EABG1

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012618

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL386

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 13 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3

CONCENTRATION UNITS:

Number TICs found: 8 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.07	670	BJV
2.	UNKNOWN	10.45	480	BJV
3.	UNKNOWN	11.30	840	J
4.	UNKNOWN ALCOHOL	13.78	370	J
5.	UNKNOWN	20.80	82	J
6. 57103	Hexadecanoic acid	23.80	580	JN
7. 57114	Octadecanoic acid	25.86	150	JN
8.	UNKNOWN	28.90	170	J

AV

5/15/95

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ92

1 Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012610

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL392

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 24 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl)Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	71	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	55	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	78	J

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ92

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012610

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL392

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 24 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	87	J
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	150	J
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	130	J
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	1300	
120-12-7-----	Anthracene	220	J
86-74-8-----	Carbazole	180	J
84-74-2-----	Di-n-Butylphthalate	28	J
206-44-0-----	Fluoranthene	1500	
129-00-0-----	Pyrene	1300	
85-68-7-----	Butylbenzylphthalate	79	J
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	600	
218-01-9-----	Chrysene	640	
117-81-7-----	bis(2-Ethylhexyl) Phthalate	260	J
117-84-0-----	Di-n-Octyl Phthalate	430	U
205-99-2-----	Benzo(b)Fluoranthene	520	
207-08-9-----	Benzo(k)Fluoranthene	570	
50-32-8-----	Benzo(a)Pyrene	510	
193-39-5-----	Indeno(1,2,3-cd) Pyrene	300	J
53-70-3-----	Dibenz(a,h)Anthracene	430	U
191-24-2-----	Benzo(g,h,i)Perylene	310	J

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ92

I Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012610

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL392

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 24 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CONCENTRATION UNITS:

Number TICs found: 14 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.07	870	BJV
2.	UNKNOWN	10.45	350	BJV
3.	UNKNOWN	11.30	750	J
4.	UNKNOWN ALCOHOL	13.77	300	J
5.	UNKNOWN MW204	17.65	420	J
6. 57103	Hexadecanoic acid	23.80	510	JN
7.	UNKNOWN PNA MW190	24.43	260	J
8.	UNKNOWN	24.79	270	J
9.	UNKNOWN	28.89	400	J
10.	UNKNOWN	32.25	130	J
11.	UNKNOWN ALCOHOL	32.99	690	J
12.	UNKNOWN	36.01	1900	J
13.	UNKNOWN COLUMN BLEED	40.73	1100	J
14.	UNKNOWN COLUMN BLEED	48.16	2300	J

AV
 5-25-95

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ92RE

1 Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012610RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL406

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 24 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy) Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	71	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	52	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	77	J

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EXQ92RE

I Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012610RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL406

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 24 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	83	J
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	150	J
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	140	J
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	1300	
120-12-7-----	Anthracene	210	J
86-74-8-----	Carbazole	170	J
84-74-2-----	Di-n-Butylphthalate	25	J
206-44-0-----	Fluoranthene	1300	
129-00-0-----	Pyrene	2100	
85-68-7-----	Butylbenzylphthalate	430	U
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	570	
218-01-9-----	Chrysene	640	
117-81-7-----	bis(2-Ethylhexyl) Phthalate	240	J
117-84-0-----	Di-n-Octyl Phthalate	430	U
205-99-2-----	Benzo(b)Fluoranthene	500	
207-08-9-----	Benzo(k)Fluoranthene	510	
50-32-8-----	Benzo(a)Pyrene	500	
193-39-5-----	Indeno(1,2,3-cd) Pyrene	320	J
53-70-3-----	Dibenzo(a,h) Anthracene	430	U
191-24-2-----	Benzo(g,h,i) Perylene	400	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ92RE

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012610RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL406		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	24	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/15/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	6.2		

CONCENTRATION UNITS:

Number TICs found: 18 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.98	810	BJV
2.	UNKNOWN	10.37	340	BJV
3.	UNKNOWN	11.23	660	J
4.	UNKNOWN	13.38	120	J
5.	UNKNOWN ALCOHOL	13.72	280	J
6.	UNKNOWN MW204	17.60	380	J
7.	UNKNOWN	20.38	200	J
8. 57-10-3	Hexadecanoic acid	23.76	400	JN
9.	UNKNOWN PNA MW192	24.08	170	J
10.	UNKNOWN PNA MW190	24.38	230	J
11.	UNKNOWN MW204	24.74	220	J
12. 84-65-1	9,10-Anthracenedione	24.90	110	JN
13. 511-15-9	2-Phenanthrenol, 4b,5,6,7,8,	28.04	1500	JN
14.	UNKNOWN	32.93	2300	J
15.	UNKNOWN	35.90	2400	J
16.	UNKNOWN COLUMN BLEED	39.57	1500	J
17.	UNKNOWN COLUMN BLEED	43.33	2800	J
18.	UNKNOWN COLUMN BLEED	47.97	2400	J

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1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93

Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABES
Matrix: (soil/water) SOIL		Lab Sample ID: B5012611	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL408
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture:	25	decanted: (Y/N)	N
Concentrated Extract Volume: 500.0 (uL)		Date Extracted: 05/06/95	
Injection Volume:	2.0 (uL)	Date Analyzed: 05/15/95	
GPC Cleanup:	(Y/N) Y	pH:	7.3
		Dilution Factor: 1.0	

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	440	U
111-44-4-----	bis(2-Chloroethyl)Ether	440	U
95-57-8-----	2-Chlorophenol	440	U
541-73-1-----	1,3-Dichlorobenzene	440	U
106-46-7-----	1,4-Dichlorobenzene	440	U
95-50-1-----	1,2-Dichlorobenzene	440	U
95-48-7-----	2-Methylphenol	440	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	440	U
106-44-5-----	4-Methylphenol	440	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	440	U
67-72-1-----	Hexachloroethane	440	U
98-95-3-----	Nitrobenzene	440	U
78-59-1-----	Isophorone	440	U
88-75-5-----	2-Nitrophenol	440	U
105-67-9-----	2,4-Dimethylphenol	440	U
111-91-1-----	bis(2-Chloroethoxy)Methane	440	U
120-83-2-----	2,4-Dichlorophenol	440	U
120-82-1-----	1,2,4-Trichlorobenzene	440	U
91-20-3-----	Naphthalene	440	U
106-47-8-----	4-Chloroaniline	440	U
87-68-3-----	Hexachlorobutadiene	440	U
59-50-7-----	4-Chloro-3-Methylphenol	440	U
91-57-6-----	2-Methylnaphthalene	440	U
77-47-4-----	Hexachlorocyclopentadiene	440	U
88-06-2-----	2,4,6-Trichlorophenol	440	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	440	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	440	U
208-96-8-----	Acenaphthylene	440	U
606-20-2-----	2,6-Dinitrotoluene	440	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	440	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93

Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012611

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL408

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 25 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	440	U
121-14-2-----	2,4-Dinitrotoluene	440	U
84-66-2-----	Diethylphthalate	26	J
7005-72-3-----	4-Chlorophenyl-phenylether	440	U
86-73-7-----	Fluorene	440	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	440	U
101-55-3-----	4-Bromophenyl-phenylether	440	U
118-74-1-----	Hexachlorobenzene	440	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	320	J
120-12-7-----	Anthracene	48	J
86-74-8-----	Carbazole	42	J
84-74-2-----	Di-n-Butylphthalate	63	J
206-44-0-----	Fluoranthene	600	
129-00-0-----	Pyrene	780	
85-68-7-----	Butylbenzylphthalate	440	U
91-94-1-----	3,3'-Dichlorobenzidine	440	U
56-55-3-----	Benzo(a)Anthracene	270	J
218-01-9-----	Chrysene	340	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	150	J
117-84-0-----	Di-n-Octyl Phthalate	440	U
205-99-2-----	Benzo(b)Fluoranthene	300	J
207-08-9-----	Benzo(k)Fluoranthene	330	J
50-32-8-----	Benzo(a)Pyrene	300	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	270	J
53-70-3-----	Dibenz(a,h)Anthracene	150	J
191-24-2-----	Benzo(g,h,i)Perylene	270	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ93

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABES		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012611		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL408		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	25	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/15/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.3		

CONCENTRATION UNITS:

Number TICs found: 19 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.00	960	BJV
2.	UNKNOWN	10.38	250	BJV
3.	UNKNOWN	11.24	1000	J
4.	UNKNOWN	13.38	130	J
5.	UNKNOWN ALCOHOL	13.72	360	J
6.	UNKNOWN ACID	16.46	98	J
7.	UNKNOWN	18.21	120	J
8. 1002842	Pentadecanoic acid	22.23	130	JN
9. 2091294	9-Hexadecenoic acid	23.61	210	JN
10.	UNKNOWN	23.70	360	J
11. 57103	Hexadecanoic acid	23.77	790	JN
12.	UNKNOWN ACID	25.65	440	J
13.	UNKNOWN	28.84	1100	J
14.	UNKNOWN MW234	29.18	380	J
15.	UNKNOWN	32.93	770	J
16.	UNKNOWN COLUMN BLEED	39.62	520	J
17.	UNKNOWN COLUMN BLEED	42.51	540	J
18.	UNKNOWN COLUMN BLEED	47.24	1500	J
19.	UNKNOWN COLUMN BLEED	47.97	1000	J

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5-25-95

1B
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93RE

Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABES
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012611RI
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL430
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture:	25	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/16/95
GPC Cleanup: (Y/N)	Y	pH:	7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND			
108-95-2-----	Phenol	440	U	
111-44-4-----	bis(2-Chloroethyl) Ether	440	U	
95-57-8-----	2-Chlorophenol	440	U	
541-73-1-----	1,3-Dichlorobenzene	440	U	
106-46-7-----	1,4-Dichlorobenzene	440	U	
95-50-1-----	1,2-Dichlorobenzene	440	U	
95-48-7-----	2-Methylphenol	440	U	
108-60-1-----	2,2'-oxybis(1-Chloropropane)	440	U	
106-44-5-----	4-Methylphenol	440	U	
621-64-7-----	N-Nitroso-Di-n-Propylamine	440	U	
67-72-1-----	Hexachloroethane	440	U	
98-95-3-----	Nitrobenzene	440	U	
78-59-1-----	Isophorone	440	U	
88-75-5-----	2-Nitrophenol	440	U	
105-67-9-----	2,4-Dimethylphenol	440	U	
111-91-1-----	bis(2-Chloroethoxy) Methane	440	U	
120-83-2-----	2,4-Dichlorophenol	440	U	
120-82-1-----	1,2,4-Trichlorobenzene	440	U	
91-20-3-----	Naphthalene	440	U	
106-47-8-----	4-Chloroaniline	440	U	
87-68-3-----	Hexachlorobutadiene	440	U	
59-50-7-----	4-Chloro-3-Methylphenol	440	U	
91-57-6-----	2-Methylnaphthalene	440	U	
77-47-4-----	Hexachlorocyclopentadiene	440	U	
88-06-2-----	2,4,6-Trichlorophenol	440	U	
95-95-4-----	2,4,5-Trichlorophenol	1100	U	
91-58-7-----	2-Chloronaphthalene	440	U	
88-74-4-----	2-Nitroaniline	1100	U	
131-11-3-----	Dimethyl Phthalate	440	U	
208-96-8-----	Acenaphthylene	440	U	
606-20-2-----	2,6-Dinitrotoluene	440	U	
99-09-2-----	3-Nitroaniline	1100	U	
83-32-9-----	Acenaphthene	23	J	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93RE

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012611RI	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL430
Level: (low/med)	LOW	Date Received:	05/05/95
% Moisture:	25	decanted: (Y/N)	N
Concentrated Extract Volume: 500.0 (uL)		Date Extracted: 05/06/95	
Injection Volume:	2.0 (uL)	Date Analyzed: 05/16/95	
GPC Cleanup: (Y/N)	Y	pH:	7.3
		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	440	U
121-14-2-----	2,4-Dinitrotoluene	440	U
84-66-2-----	Diethylphthalate	27	J
7005-72-3-----	4-Chlorophenyl-phenylether	440	U
86-73-7-----	Fluorene	440	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	440	U
101-55-3-----	4-Bromophenyl-phenylether	440	U
118-74-1-----	Hexachlorobenzene	440	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	310	J
120-12-7-----	Anthracene	39	J
86-74-8-----	Carbazole	45	J
84-74-2-----	Di-n-Butylphthalate	63	J
206-44-0-----	Fluoranthene	620	
129-00-0-----	Pyrene	830	
85-68-7-----	Butylbenzylphthalate	440	U
91-94-1-----	3,3'-Dichlorobenzidine	440	U
56-55-3-----	Benzo(a)Anthracene	280	J
218-01-9-----	Chrysene	340	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	160	J
117-84-0-----	Di-n-Octyl Phthalate	440	U
205-99-2-----	Benzo(b)Fluoranthene	300	J
207-08-9-----	Benzo(k)Fluoranthene	370	J
50-32-8-----	Benzo(a)Pyrene	290	J
193-39-5-----	Indeno(1,2,3-cd) Pyrene	230	J
53-70-3-----	Dibenz(a,h)Anthracene	440	U
191-24-2-----	Benzo(g,h,i)Perylene	220	J

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ93RE

I Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012611RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL430		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	25	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.3		

CONCENTRATION UNITS:
 Number TICs found: 11 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.82	950	BJV
2.	UNKNOWN	10.20	270	BJV
3.	UNKNOWN	11.08	1000	J
4.	UNKNOWN	13.28	150	J
5.	UNKNOWN ALCOHOL	13.62	340	J
6.	UNKNOWN ACID	16.38	120	J
7.	UNKNOWN KETONE	18.15	120	J
8. 2091294	9-Hexadecenoic acid	23.54	120	JN
9.	UNKNOWN	23.63	180	J
10. 57103	Hexadecanoic acid	23.70	390	JN
11.	UNKNOWN ACID	25.58	120	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ94

L Name: RECRA ENVIRON Contract: 68D50010
 Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABES
 Matrix: (soil/water) SOIL Lab Sample ID: B5012612
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL409
 Level: (low/med) LOW Date Received: 05/05/95
 % Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 7.1

CONCENTRATION UNITS:
 (ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl)Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	26	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	44	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	430	U

1C
SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ94

L Name: RECRA ENVIRON Contract: 68D50010
 Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5
 Matrix: (soil/water) SOIL Lab Sample ID: B5012612
 Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL409
 Level: (low/med) LOW Date Received: 05/05/95
 % Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95
 Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0
 GPC Cleanup: (Y/N) Y pH: 7.1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	430	U
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	430	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	200	J
120-12-7-----	Anthracene	430	U
86-74-8-----	Carbazole	24	J
84-74-2-----	Di-n-Butylphthalate	260	J
206-44-0-----	Fluoranthene	330	J
129-00-0-----	Pyrene	630	
85-68-7-----	Butylbenzylphthalate	430	U
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	180	J
218-01-9-----	Chrysene	250	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	730	
117-84-0-----	Di-n-Octyl Phthalate	430	U
205-99-2-----	Benzo(b)Fluoranthene	240	J
207-08-9-----	Benzo(k)Fluoranthene	200	J
50-32-8-----	Benzo(a)Pyrene	240	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	190	J
53-70-3-----	Dibenz(a,h)Anthracene	430	U
191-24-2-----	Benzo(g,h,i)Perylene	170	J

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ94

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012612

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL409

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/15/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CONCENTRATION UNITS:
Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	920	BJL
2.	UNKNOWN	10.38	320	BJL
3.	UNKNOWN	11.24	1100	J
4.	UNKNOWN	13.39	130	J
5.	UNKNOWN ALCOHOL	13.72	400	J
6.	UNKNOWN TRIMETHYLNAPHTHALENE	20.12	100	J
7. 1002842	Pentadecanoic acid	22.22	110	JN
8. 2091294	9-Hexadecenoic acid	23.60	180	JN
9.	UNKNOWN	23.69	87	J
10. 57103	Hexadecanoic acid	23.76	530	JN
11.	UNKNOWN	25.68	130	J
12. 57114	Octadecanoic acid	25.81	93	JN
13.	UNKNOWN	28.84	1100	J
14.	UNKNOWN COLUMN BLEED	32.19	510	J
15.	UNKNOWN	32.92	1100	J

A
5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ94RE

L Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012612RI
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL431
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	23	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/16/95
GPC Cleanup:	(Y/N) Y	pH:	7.1
		CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	25	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	45	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	430	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

L Name:	RECRA ENVIRON	Contract:	68D50010		
Lab Code:	RECMD	Case No.:	23525	SAS No.:	
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012612RI		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL431		
Level:	(low/med) LOW	Date Received:	05/05/95		
% Moisture:	23	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup:	(Y/N) Y	pH:	7.1		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	430	U
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	430	U
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	190	J
120-12-7-----	Anthracene	430	U
86-74-8-----	Carbazole	24	J
84-74-2-----	Di-n-Butylphthalate	260	J
206-44-0-----	Fluoranthene	350	J
129-00-0-----	Pyrene	520	
85-68-7-----	Butylbenzylphthalate	210	J
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	180	J
218-01-9-----	Chrysene	240	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	700	
117-84-0-----	Di-n-Octyl Phthalate	35	J
205-99-2-----	Benzo(b)Fluoranthene	190	J
207-08-9-----	Benzo(k)Fluoranthene	330	J
50-32-8-----	Benzo(a)Pyrene	280	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	170	J
53-70-3-----	Dibenz(a,h)Anthracene	430	U
191-24-2-----	Benzo(g,h,i)Perylene	150	J

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ94RE

L Name: RECPA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012612RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL431

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.1

CONCENTRATION UNITS:
 Number TICs found: 13 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.51	96	J
2.	UNKNOWN	9.82	940	BJU
3.	UNKNOWN	10.19	410	BJU
4.	UNKNOWN	11.09	1100	J
5.	UNKNOWN	13.28	140	J
6.	UNKNOWN ALCOHOL	13.62	400	J
7.	UNKNOWN DIMETHYLNAPHTHALENE	17.60	110	J
8.	UNKNOWN TRIMETHYLNAPHTHALENE	19.43	100	J
9. 1002842	Pentadecanoic acid	22.16	98	JN
10.	UNKNOWN	23.54	120	J
11. 57103	Hexadecanoic acid	23.69	340	JN
12.	UNKNOWN	28.77	320	J
13.	UNKNOWN COLUMN BLEED	35.48	560	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL427

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
---------	----------	-----------------------	---

108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy) Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	70	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	79	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	230	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95

1 Name: RECRA ENVIRON	Contract: 68D50010				
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5		
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012613		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL427		
Level: (low/med)	LOW	Date Received:	05/05/95		
% Moisture:	23	decanted: (Y/N)	N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/16/95		
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0		
GPC Cleanup: (Y/N)	Y	pH:	7.3		

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND			
51-28-5-----	2,4-Dinitrophenol	1100	U	
100-02-7-----	4-Nitrophenol	1100	U	
132-64-9-----	Dibenzofuran	130	J	
121-14-2-----	2,4-Dinitrotoluene	430	U	
84-66-2-----	Diethylphthalate	430	U	
7005-72-3-----	4-Chlorophenyl-phenylether	430	U	
86-73-7-----	Fluorene	230	J	
100-01-6-----	4-Nitroaniline	1100	U	
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U	
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U	
101-55-3-----	4-Bromophenyl-phenylether	430	U	
118-74-1-----	Hexachlorobenzene	430	U	
87-86-5-----	Pentachlorophenol	1100	U	
85-01-8-----	Phenanthrene	2400		
120-12-7-----	Anthracene	360	J	
86-74-8-----	Carbazole	390	J	
84-74-2-----	Di-n-Butylphthalate	29	J	
206-44-0-----	Fluoranthene	3500	E	
129-00-0-----	Pyrene	5500	E	
85-68-7-----	Butylbenzylphthalate	68	J	
91-94-1-----	3,3'-Dichlorobenzidine	430	U	
56-55-3-----	Benzo(a)Anthracene	1400		
218-01-9-----	Chrysene	1700		
117-81-7-----	bis(2-Ethylhexyl)Phthalate	850		
117-84-0-----	Di-n-Octyl Phthalate	26	J	
205-99-2-----	Benzo(b)Fluoranthene	1500		
207-08-9-----	Benzo(k)Fluoranthene	1600		
50-32-8-----	Benzo(a)Pyrene	1400		
193-39-5-----	Indeno(1,2,3-cd)Pyrene	700		
53-70-3-----	Dibenz(a,h)Anthracene	570		
191-24-2-----	Benzo(g,h,i)Perylene	620		

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ95

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012613
Sample wt/vol:	30.0 (g/mL) G	Lab File ID: DL427
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture:	23	decanted: (Y/N) N Date Extracted: 05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed: 05/16/95
Injection Volume:	2.0 (uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 7.3	

CONCENTRATION UNITS:
 Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.81	890	BJV
2.	UNKNOWN	10.19	280	BJV
3.	UNKNOWN	11.08	880	J
4.	UNKNOWN ALCOHOL	13.62	320	J
5.	UNKNOWN PNA	20.67	200	J
6. 57103	Hexadecanoic acid	23.69	320	JN
7.	UNKNOWN PNA MW192	23.92	220	J
8.	UNKNOWN PNA MW190	24.31	630	J
9. 84651	9,10-Anthracenedione	24.83	280	JN
10.	UNKNOWN	26.23	180	J
11.	UNKNOWN PNA MW218	26.46	420	J
12.	UNKNOWN PNA MW216	27.08	310	J
13.	UNKNOWN PNA MW216	27.40	710	J
14.	UNKNOWN PNA MW216	27.56	390	J
15.	UNKNOWN PNA MW252	34.68	420	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95DL

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL442

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	860	U
111-44-4-----	bis(2-Chloroethyl)Ether	860	U
95-57-8-----	2-Chlorophenol	860	U
541-73-1-----	1,3-Dichlorobenzene	860	U
106-46-7-----	1,4-Dichlorobenzene	860	U
95-50-1-----	1,2-Dichlorobenzene	860	U
95-48-7-----	2-Methylphenol	860	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	860	U
106-44-5-----	4-Methylphenol	860	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	860	U
67-72-1-----	Hexachloroethane	860	U
98-95-3-----	Nitrobenzene	860	U
78-59-1-----	Isophorone	860	U
88-75-5-----	2-Nitrophenol	860	U
105-67-9-----	2,4-Dimethylphenol	860	U
111-91-1-----	bis(2-Chloroethoxy)Methane	860	U
120-83-2-----	2,4-Dichlorophenol	860	U
120-82-1-----	1,2,4-Trichlorobenzene	860	U
91-20-3-----	Naphthalene	64	DJ
106-47-8-----	4-Chloroaniline	860	U
87-68-3-----	Hexachlorobutadiene	860	U
59-50-7-----	4-Chloro-3-Methylphenol	860	U
91-57-6-----	2-Methylnaphthalene	72	DJ
77-47-4-----	Hexachlorocyclopentadiene	860	U
88-06-2-----	2,4,6-Trichlorophenol	860	U
95-95-4-----	2,4,5-Trichlorophenol	2200	U
91-58-7-----	2-Chloronaphthalene	860	U
88-74-4-----	2-Nitroaniline	2200	U
131-11-3-----	Dimethyl Phthalate	860	U
208-96-8-----	Acenaphthylene	860	U
606-20-2-----	2,6-Dinitrotoluene	860	U
99-09-2-----	3-Nitroaniline	2200	U
83-32-9-----	Acenaphthene	220	DJ

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95DL

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL442

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	2200	U
100-02-7-----	4-Nitrophenol	2200	U
132-64-9-----	Dibenzofuran	110	DJ
121-14-2-----	2,4-Dinitrotoluene	860	U
84-66-2-----	Diethylphthalate	860	U
7005-72-3-----	4-Chlorophenyl-phenylether	860	U
86-73-7-----	Fluorene	210	DJ
100-01-6-----	4-Nitroaniline	2200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	2200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	860	U
101-55-3-----	4-Bromophenyl-phenylether	860	U
118-74-1-----	Hexachlorobenzene	860	U
87-86-5-----	Pentachlorophenol	2200	U
85-01-8-----	Phenanthrene	2600	D
120-12-7-----	Anthracene	350	DJ
86-74-8-----	Carbazole	330	DJ
84-74-2-----	Di-n-Butylphthalate	860	U
206-44-0-----	Fluoranthene	3500	D
129-00-0-----	Pyrene	3100	D
85-68-7-----	Butylbenzylphthalate	860	U
91-94-1-----	3,3'-Dichlorobenzidine	860	U
56-55-3-----	Benzo(a)Anthracene	1400	D
218-01-9-----	Chrysene	1600	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	680	DJ
117-84-0-----	Di-n-Octyl Phthalate	860	U
205-99-2-----	Benzo(b)Fluoranthene	1200	D
207-08-9-----	Benzo(k)Fluoranthene	1700	D
50-32-8-----	Benzo(a)Pyrene	1200	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	660	DJ
53-70-3-----	Dibenz(a,h)Anthracene	310	DJ
191-24-2-----	Benzo(g,h,i)Perylene	440	DJ

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ95DL

Lc Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012613DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL442

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
Number TICs found: 13 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.00	1000	BJV
2.	UNKNOWN	10.39	290	BJV
3.	UNKNOWN	11.21	1300	J
4.	UNKNOWN ALCOHOL	13.65	350	J
5. 57103	Hexadecanoic acid	23.62	210	JN
6.	UNKNOWN PNA MW192	23.87	180	J
7.	UNKNOWN PNA MW192	23.95	310	J
8.	UNKNOWN PNA MW190	24.24	560	J
9. 84651	9,10-Anthracenedione	24.77	290	JN
10.	UNKNOWN PNA MW216	27.32	410	J
11.	UNKNOWN COLUMN BLEED	28.71	430	J
12.	UNKNOWN COLUMN BLEED	32.54	3100	J
13.	UNKNOWN COLUMN BLEED	35.36	2200	J

AV
5.25.95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95RE

Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL444

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	71	J
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	73	J
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	220	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95RE

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012613RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL444

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1100	U	
100-02-7-----	4-Nitrophenol	1100	U	
132-64-9-----	Dibenzofuran	110	J	
121-14-2-----	2,4-Dinitrotoluene	430	U	
84-66-2-----	Diethylphthalate	430	U	
7005-72-3-----	4-Chlorophenyl-phenylether	430	U	
86-73-7-----	Fluorene	220	J	
100-01-6-----	4-Nitroaniline	1100	U	
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U	
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U	
101-55-3-----	4-Bromophenyl-phenylether	430	U	
118-74-1-----	Hexachlorobenzene	430	U	
87-86-5-----	Pentachlorophenol	1100	U	
85-01-8-----	Phenanthrene	2600		
120-12-7-----	Anthracene	360	J	
86-74-8-----	Carbazole	360	J	
84-74-2-----	Di-n-Butylphthalate	30	J	
206-44-0-----	Fluoranthene	3600	E	
129-00-0-----	Pyrene	4800	E	
85-68-7-----	Butylbenzylphthalate	66	J	
91-94-1-----	3,3'-Dichlorobenzidine	430	U	
56-55-3-----	Benzo(a)Anthracene	1300		
218-01-9-----	Chrysene	1600		
117-81-7-----	bis(2-Ethylhexyl)Phthalate	810		
117-84-0-----	Di-n-Octyl Phthalate	430	U	
205-99-2-----	Benzo(b)Fluoranthene	1700		
207-08-9-----	Benzo(k)Fluoranthene	1200		
50-32-8-----	Benzo(a)Pyrene	1300		
193-39-5-----	Indeno(1,2,3-cd)Pyrene	790		
53-70-3-----	Dibenz(a,h)Anthracene	280	J	
191-24-2-----	Benzo(g,h,i)Perylene	680		

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	110	J
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	220	J
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	2600	
120-12-7-----	Anthracene	360	J
86-74-8-----	Carbazole	360	J
84-74-2-----	Di-n-Butylphthalate	30	J
206-44-0-----	Fluoranthene	3600	E
129-00-0-----	Pyrene	4800	E
85-68-7-----	Butylbenzylphthalate	66	J
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	1300	
218-01-9-----	Chrysene	1600	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	810	
117-84-0-----	Di-n-Octyl Phthalate	430	U
205-99-2-----	Benzo(b)Fluoranthene	1700	
207-08-9-----	Benzo(k)Fluoranthene	1200	
50-32-8-----	Benzo(a)Pyrene	1300	
193-39-5-----	Indeno(1,2,3-cd)Pyrene	790	
53-70-3-----	Dibenz(a,h)Anthracene	280	J
191-24-2-----	Benzo(g,h,i)Perylene	680	

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ95RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012613RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL444

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
 Number TICs found: 17 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.01	1100	BJV
2.	UNKNOWN	10.39	360	BJV
3.	UNKNOWN	11.22	1300	J
4.	UNKNOWN ALCOHOL	13.65	320	J
5. 132650	Dibenzothiophene	22.26	190	JN
6. 57103	Hexadecanoic acid	23.64	390	JN
7.	UNKNOWN PNA MW192	23.87	210	J
8.	UNKNOWN PNA MW190	24.25	660	J
9. 84651	9,10-Anthracenedione	24.78	360	JN
10.	UNKNOWN PNA MW216	27.34	640	J
11.	UNKNOWN MW216	27.50	340	J
12.	UNKNOWN	28.72	550	J
13.	UNKNOWN COLUMN BLEED	30.10	270	J
14.	UNKNOWN COLUMN BLEED	32.54	1100	J
15.	UNKNOWN COLUMN BLEED	32.72	840	J
16.	UNKNOWN COLUMN BLEED	35.36	810	J
17.	UNKNOWN COLUMN BLEED	39.23	540	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012614

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL428

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy)Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	430	U
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	430	U
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	170	J

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012614		
Sample wt/vol: 30.0 (g/mL) G	Lab File ID: DL428		
Level: (low/med) LOW	Date Received: 05/05/95		
% Moisture: 23 decanted: (Y/N) N	Date Extracted: 05/06/95		
Concentrated Extract Volume: 500.0 (uL)	Date Analyzed: 05/16/95		
Injection Volume: 2.0 (uL)	Dilution Factor: 1.0		
GPC Cleanup: (Y/N) Y	pH: 7.2	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	86	J
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	190	J
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	2100	
120-12-7-----	Anthracene	360	J
86-74-8-----	Carbazole	270	J
84-74-2-----	Di-n-Butylphthalate	31	J
206-44-0-----	Fluoranthene	3200	
129-00-0-----	Pyrene	5700	E
85-68-7-----	Butylbenzylphthalate	430	U
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	1300	
218-01-9-----	Chrysene	1600	
117-81-7-----	bis(2-Ethylhexyl) Phthalate	2600	
117-84-0-----	Di-n-Octyl Phthalate	52	J
205-99-2-----	Benzo(b)Fluoranthene	1500	
207-08-9-----	Benzo(k)Fluoranthene	1500	
50-32-8-----	Benzo(a)Pyrene	1100	
193-39-5-----	Indeno(1,2,3-cd) Pyrene	840	
53-70-3-----	Dibenz(a,h)Anthracene	890	
191-24-2-----	Benzo(g,h,i)Perylene	1100	

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ96

L. Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012614
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL428
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	23	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/16/95
GPC Cleanup:	(Y/N) Y	Dilution Factor:	1.0
		pH:	7.2

CONCENTRATION UNITS:
 Number TICs found: 17 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.82	900	BJV
2.	UNKNOWN	10.19	230	BJV
3.	UNKNOWN	11.08	1100	J
4.	UNKNOWN ALCOHOL	13.62	340	J
5.	UNKNOWN PNA MW182	20.68	160	J
6.	UNKNOWN BENZENE, 1,1'-(1,2-C	21.97	670	J
7. 132650	Dibenzothiophene	22.33	160	JN
8. 57103	Hexadecanoic acid	23.69	2700	JN
9.	UNKNOWN PNA MW190	24.31	360	J
10.	UNKNOWN PNA MW204	24.70	150	J
11. 84651	9,10-Athracenedione	24.83	200	JN
12.	UNKNOWN PNA MW216	27.41	290	J
13.	UNKNOWN AROMATIC	29.09	530	J
14.	UNKNOWN	30.18	500	J
15.	UNKNOWN	30.26	690	J
16.	UNKNOWN	30.38	760	J
17.	UNKNOWN COLUMN BLEED	35.47	270	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96DL

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012614DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL443

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) UG/KG	Q
108-95-2-----	Phenol	860	U
111-44-4-----	bis(2-Chloroethyl)Ether	860	U
95-57-8-----	2-Chlorophenol	860	U
541-73-1-----	1,3-Dichlorobenzene	860	U
106-46-7-----	1,4-Dichlorobenzene	860	U
95-50-1-----	1,2-Dichlorobenzene	860	U
95-48-7-----	2-Methylphenol	860	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	860	U
106-44-5-----	4-Methylphenol	860	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	860	U
67-72-1-----	Hexachloroethane	860	U
98-95-3-----	Nitrobenzene	860	U
78-59-1-----	Isophorone	860	U
88-75-5-----	2-Nitrophenol	860	U
105-67-9-----	2,4-Dimethylphenol	860	U
111-91-1-----	bis(2-Chloroethoxy)Methane	860	U
120-83-2-----	2,4-Dichlorophenol	860	U
120-82-1-----	1,2,4-Trichlorobenzene	860	U
91-20-3-----	Naphthalene	860	U
106-47-8-----	4-Chloroaniline	860	U
87-68-3-----	Hexachlorobutadiene	860	U
59-50-7-----	4-Chloro-3-Methylphenol	860	U
91-57-6-----	2-Methylnaphthalene	860	U
77-47-4-----	Hexachlorocyclopentadiene	860	U
88-06-2-----	2,4,6-Trichlorophenol	860	U
95-95-4-----	2,4,5-Trichlorophenol	2200	U
91-58-7-----	2-Chloronaphthalene	860	U
88-74-4-----	2-Nitroaniline	2200	U
131-11-3-----	Dimethyl Phthalate	860	U
208-96-8-----	Acenaphthylene	860	U
606-20-2-----	2,6-Dinitrotoluene	860	U
99-09-2-----	3-Nitroaniline	2200	U
83-32-9-----	Acenaphthene	150	DJ

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EXQ96DL

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012614DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL443

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
51-28-5-----	2,4-Dinitrophenol	2200	U
100-02-7-----	4-Nitrophenol	2200	U
132-64-9-----	Dibenzofuran	76	DJ
121-14-2-----	2,4-Dinitrotoluene	860	U
84-66-2-----	Diethylphthalate	860	U
7005-72-3-----	4-Chlorophenyl-phenylether	860	U
86-73-7-----	Fluorene	180	DJ
100-01-6-----	4-Nitroaniline	2200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	2200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	860	U
101-55-3-----	4-Bromophenyl-phenylether	860	U
118-74-1-----	Hexachlorobenzene	860	U
87-86-5-----	Pentachlorophenol	2200	U
85-01-8-----	Phenanthrene	2100	D
120-12-7-----	Anthracene	320	DJ
86-74-8-----	Carbazole	220	DJ
84-74-2-----	Di-n-Butylphthalate	860	U
206-44-0-----	Fluoranthene	3500	D
129-00-0-----	Pyrene	2900	D
85-68-7-----	Butylbenzylphthalate	70	DJ
91-94-1-----	3,3'-Dichlorobenzidine	860	U
56-55-3-----	Benzo(a)Anthracene	1200	D
218-01-9-----	Chrysene	1400	D
117-81-7-----	bis(2-Ethylhexyl)Phthalate	2000	D
117-84-0-----	Di-n-Octyl Phthalate	860	U
205-99-2-----	Benzo(b)Fluoranthene	1500	D
207-08-9-----	Benzo(k)Fluoranthene	1700	D
50-32-8-----	Benzo(a)Pyrene	1300	D
193-39-5-----	Indeno(1,2,3-cd)Pyrene	710	DJ
53-70-3-----	Dibenz(a,h)Anthracene	370	DJ
191-24-2-----	Benzo(g,h,i)Perylene	640	DJ

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ96DL

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012614DL

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL443

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:

Number TICs found: 16 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.01	1000	BJV
2.	UNKNOWN	10.40	260	BJV
3.	UNKNOWN	11.21	1200	J
4.	UNKNOWN ALCOHOL	13.65	330	J
5.	UNKNOWN BENZENE, 1,1'-(1,2-C	21.90	610	J
6. 57103	Hexadecanoic acid	23.63	260	JN
7.	UNKNOWN PNA MW192	23.95	180	J
8.	UNKNOWN PNA MW190	24.24	390	J
9. 84651	9,10-Anthracenedione	24.77	210	JN
10.	UNKNOWN AROMATIC	29.03	920	J
11.	UNKNOWN	30.10	890	J
12.	UNKNOWN	30.19	1500	J
13.	UNKNOWN	30.32	1400	J
14.	UNKNOWN COLUMN BLEED	32.55	950	J
15.	UNKNOWN COLUMN BLEED	32.72	1300	J
16.	UNKNOWN COLUMN BLEED	35.36	1200	J

AV
 5-25-95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96RE

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012614RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL445

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	430	U
111-44-4-----	bis(2-Chloroethyl) Ether	430	U
95-57-8-----	2-Chlorophenol	430	U
541-73-1-----	1,3-Dichlorobenzene	430	U
106-46-7-----	1,4-Dichlorobenzene	430	U
95-50-1-----	1,2-Dichlorobenzene	430	U
95-48-7-----	2-Methylphenol	430	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	430	U
106-44-5-----	4-Methylphenol	430	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	430	U
67-72-1-----	Hexachloroethane	430	U
98-95-3-----	Nitrobenzene	430	U
78-59-1-----	Isophorone	430	U
88-75-5-----	2-Nitrophenol	430	U
105-67-9-----	2,4-Dimethylphenol	430	U
111-91-1-----	bis(2-Chloroethoxy) Methane	430	U
120-83-2-----	2,4-Dichlorophenol	430	U
120-82-1-----	1,2,4-Trichlorobenzene	430	U
91-20-3-----	Naphthalene	430	U
106-47-8-----	4-Chloroaniline	430	U
87-68-3-----	Hexachlorobutadiene	430	U
59-50-7-----	4-Chloro-3-Methylphenol	430	U
91-57-6-----	2-Methylnaphthalene	430	U
77-47-4-----	Hexachlorocyclopentadiene	430	U
88-06-2-----	2,4,6-Trichlorophenol	430	U
95-95-4-----	2,4,5-Trichlorophenol	1100	U
91-58-7-----	2-Chloronaphthalene	430	U
88-74-4-----	2-Nitroaniline	1100	U
131-11-3-----	Dimethyl Phthalate	430	U
208-96-8-----	Acenaphthylene	430	U
606-20-2-----	2,6-Dinitrotoluene	430	U
99-09-2-----	3-Nitroaniline	1100	U
83-32-9-----	Acenaphthene	170	J

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96RE

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012614RI

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL445

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	1100	U
100-02-7-----	4-Nitrophenol	1100	U
132-64-9-----	Dibenzofuran	78	J
121-14-2-----	2,4-Dinitrotoluene	430	U
84-66-2-----	Diethylphthalate	430	U
7005-72-3-----	4-Chlorophenyl-phenylether	430	U
86-73-7-----	Fluorene	190	J
100-01-6-----	4-Nitroaniline	1100	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1100	U
86-30-6-----	N-Nitrosodiphenylamine (1)	430	U
101-55-3-----	4-Bromophenyl-phenylether	430	U
118-74-1-----	Hexachlorobenzene	430	U
87-86-5-----	Pentachlorophenol	1100	U
85-01-8-----	Phenanthrene	2300	
120-12-7-----	Anthracene	370	J
86-74-8-----	Carbazole	240	J
84-74-2-----	Di-n-Butylphthalate	35	J
206-44-0-----	Fluoranthene	3500	
129-00-0-----	Pyrene	5400	E
85-68-7-----	Butylbenzylphthalate	100	J
91-94-1-----	3,3'-Dichlorobenzidine	430	U
56-55-3-----	Benzo(a)Anthracene	1300	
218-01-9-----	Chrysene	1500	
117-81-7-----	bis(2-Ethylhexyl)Phthalate	2600	
117-84-0-----	Di-n-Octyl Phthalate	60	J
205-99-2-----	Benzo(b)Fluoranthene	1400	
207-08-9-----	Benzo(k)Fluoranthene	1300	
50-32-8-----	Benzo(a)Pyrene	1200	
193-39-5-----	Indeno(1,2,3-cd)Pyrene	870	
53-70-3-----	Dibenz(a,h)Anthracene	460	
191-24-2-----	Benzo(g,h,i)Perylene	620	

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EXQ96RE

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012614RI

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL445

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 23 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/17/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.2

CONCENTRATION UNITS:
Number TICs found: 15 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.02	1200	BJt
2.	UNKNOWN	10.40	280	BJt
3.	UNKNOWN	11.24	1400	J
4.	UNKNOWN ALCOHOL	13.65	370	J
5.	UNKNOWN BENZENE, 1,1'-(1,2-C	21.92	690	J
6. 57103	Hexadecanoic acid	23.64	360	JN
7.	UNKNOWN PNA MW190	24.24	390	J
8.	UNKNOWN PNA MW204	24.63	150	J
9. 84651	9,10-Anthracenedione	24.79	280	JN
10.	UNKNOWN AROMATIC	29.04	650	J
11.	UNKNOWN	30.11	590	J
12.	UNKNOWN	30.20	880	J
13.	UNKNOWN	30.32	1300	J
14.	UNKNOWN COLUMN BLEED	32.73	1100	J
15.	UNKNOWN COLUMN BLEED	35.37	1100	J

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ97

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012615

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL412

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 29 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND		
108-95-2-----	Phenol	460	U
111-44-4-----	bis(2-Chloroethyl) Ether	460	U
95-57-8-----	2-Chlorophenol	460	U
541-73-1-----	1,3-Dichlorobenzene	460	U
106-46-7-----	1,4-Dichlorobenzene	460	U
95-50-1-----	1,2-Dichlorobenzene	460	U
95-48-7-----	2-Methylphenol	460	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	460	U
106-44-5-----	4-Methylphenol	460	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	460	U
67-72-1-----	Hexachloroethane	460	U
98-95-3-----	Nitrobenzene	460	U
78-59-1-----	Isophorone	460	U
88-75-5-----	2-Nitrophenol	460	U
105-67-9-----	2,4-Dimethylphenol	460	U
111-91-1-----	bis(2-Chloroethoxy)Methane	460	U
120-83-2-----	2,4-Dichlorophenol	460	U
120-82-1-----	1,2,4-Trichlorobenzene	460	U
91-20-3-----	Naphthalene	24	J
106-47-8-----	4-Chloroaniline	460	U
87-68-3-----	Hexachlorobutadiene	460	U
59-50-7-----	4-Chloro-3-Methylphenol	460	U
91-57-6-----	2-Methylnaphthalene	44	J
77-47-4-----	Hexachlorocyclopentadiene	460	U
88-06-2-----	2,4,6-Trichlorophenol	460	U
95-95-4-----	2,4,5-Trichlorophenol	1200	U
91-58-7-----	2-Chloronaphthalene	460	U
88-74-4-----	2-Nitroaniline	1200	U
131-11-3-----	Dimethyl Phthalate	460	U
208-96-8-----	Acenaphthylene	460	U
606-20-2-----	2,6-Dinitrotoluene	460	U
99-09-2-----	3-Nitroaniline	1200	U
83-32-9-----	Acenaphthene	460	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ97

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012615

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL412

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 29 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) UG/KG	Q
---------	----------	-----------------------	---

51-28-5-----	2,4-Dinitrophenol	1200	U
100-02-7-----	4-Nitrophenol	1200	U
132-64-9-----	Dibenzofuran	460	U
121-14-2-----	2,4-Dinitrotoluene	460	U
84-66-2-----	Diethylphthalate	460	U
7005-72-3-----	4-Chlorophenyl-phenylether	460	U
86-73-7-----	Fluorene	460	U
100-01-6-----	4-Nitroaniline	1200	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	1200	U
86-30-6-----	N-Nitrosodiphenylamine (1)	460	U
101-55-3-----	4-Bromophenyl-phenylether	460	U
118-74-1-----	Hexachlorobenzene	460	U
87-86-5-----	Pentachlorophenol	1200	U
85-01-8-----	Phenanthrene	250	J
120-12-7-----	Anthracene	29	J
86-74-8-----	Carbazole	28	J
84-74-2-----	Di-n-Butylphthalate	32	J
206-44-0-----	Fluoranthene	340	J
129-00-0-----	Pyrene	870	
85-68-7-----	Butylbenzylphthalate	460	U
91-94-1-----	3,3'-Dichlorobenzidine	460	U
56-55-3-----	Benzo(a)Anthracene	180	J
218-01-9-----	Chrysene	250	J
117-81-7-----	bis(2-Ethylhexyl)Phthalate	230	J
117-84-0-----	Di-n-Octyl Phthalate	460	U
205-99-2-----	Benzo(b)Fluoranthene	300	J
207-08-9-----	Benzo(k)Fluoranthene	190	J
50-32-8-----	Benzo(a)Pyrene	240	J
193-39-5-----	Indeno(1,2,3-cd)Pyrene	240	J
53-70-3-----	Dibenz(a,h)Anthracene	460	U
191-24-2-----	Benzo(g,h,i)Perylene	270	J

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: RECRA ENVIRON

Contract: 68D50010

EXQ97

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012615

Sample wt/vol: 30.0 (g/mL) G Lab File ID: DL412

Level: (low/med) LOW Date Received: 05/05/95

% Moisture: 29 decanted: (Y/N) N Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL) Date Analyzed: 05/16/95

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.3

CONCENTRATION UNITS:

Number TICs found: 13 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	9.99	1200	BJ
2.	UNKNOWN	10.38	290	BJ
3.	UNKNOWN	11.24	800	J
4.	UNKNOWN	13.39	210	J
5.	UNKNOWN ALCOHOL	13.72	390	J
6.	UNKNOWN	20.76	140	J
7. 1002842	Pentadecanoic acid	22.24	240	JN
8.	UNKNOWN ACID	22.34	110	J
9. 2091294	9-Hexadecenoic acid	23.61	250	JN
10.	UNKNOWN	23.70	280	J
11. 57103	Hexadecanoic acid	23.77	790	JN
12.	UNKNOWN	25.70	240	J
13. 57114	Octadecanoic acid	25.82	96	JN

AV

5.25.95

SEMOVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ98

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012616

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL384

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 12 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.2

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

108-95-2-----	Phenol	370	U
111-44-4-----	bis(2-Chloroethyl)Ether	370	U
95-57-8-----	2-Chlorophenol	370	U
541-73-1-----	1,3-Dichlorobenzene	370	U
106-46-7-----	1,4-Dichlorobenzene	370	U
95-50-1-----	1,2-Dichlorobenzene	370	U
95-48-7-----	2-Methylphenol	370	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	370	U
106-44-5-----	4-Methylphenol	370	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	370	U
67-72-1-----	Hexachloroethane	370	U
98-95-3-----	Nitrobenzene	370	U
78-59-1-----	Isophorone	370	U
88-75-5-----	2-Nitrophenol	370	U
105-67-9-----	2,4-Dimethylphenol	370	U
111-91-1-----	bis(2-Chloroethoxy)Methane	370	U
120-83-2-----	2,4-Dichlorophenol	370	U
120-82-1-----	1,2,4-Trichlorobenzene	370	U
91-20-3-----	Naphthalene	370	U
106-47-8-----	4-Chloroaniline	370	U
87-68-3-----	Hexachlorobutadiene	370	U
59-50-7-----	4-Chloro-3-Methylphenol	370	U
91-57-6-----	2-Methylnaphthalene	370	U
77-47-4-----	Hexachlorocyclopentadiene	370	U
88-06-2-----	2,4,6-Trichlorophenol	370	U
95-95-4-----	2,4,5-Trichlorophenol	940	U
91-58-7-----	2-Chloronaphthalene	370	U
88-74-4-----	2-Nitroaniline	940	U
131-11-3-----	Dimethyl Phthalate	370	U
208-96-8-----	Acenaphthylene	370	U
606-20-2-----	2,6-Dinitrotoluene	370	U
99-09-2-----	3-Nitroaniline	940	U
83-32-9-----	Acenaphthene	370	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ98

L Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012616
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL384
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	12	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/13/95
GPC Cleanup:	(Y/N) Y	pH:	8.2
Dilution Factor:			1.0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
51-28-5-----	2,4-Dinitrophenol	940	U
100-02-7-----	4-Nitrophenol	940	U
132-64-9-----	Dibenzofuran	370	U
121-14-2-----	2,4-Dinitrotoluene	370	U
84-66-2-----	Diethylphthalate	370	U
7005-72-3-----	4-Chlorophenyl-phenylether	370	U
86-73-7-----	Fluorene	370	U
100-01-6-----	4-Nitroaniline	940	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	940	U
86-30-6-----	N-Nitrosodiphenylamine (1)	370	U
101-55-3-----	4-Bromophenyl-phenylether	370	U
118-74-1-----	Hexachlorobenzene	370	U
87-86-5-----	Pentachlorophenol	940	U
85-01-8-----	Phenanthrene	75	J
120-12-7-----	Anthracene	370	U
86-74-8-----	Carbazole	370	U
84-74-2-----	Di-n-Butylphthalate	370	U
206-44-0-----	Fluoranthene	120	J
129-00-0-----	Pyrene	48	J
85-68-7-----	Butylbenzylphthalate	370	U
91-94-1-----	3,3'-Dichlorobenzidine	370	U
56-55-3-----	Benzo(a)Anthracene	36	J
218-01-9-----	Chrysene	66	J
117-81-7-----	bis(2-Ethylhexyl) Phthalate	370	U
117-84-0-----	Di-n-Octyl Phthalate	370	U
205-99-2-----	Benzo(b)Fluoranthene	20	J
207-08-9-----	Benzo(k)Fluoranthene	30	J
50-32-8-----	Benzo(a)Pyrene	370	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	370	U
53-70-3-----	Dibenz(a,h)Anthracene	370	U
191-24-2-----	Benzo(g,h,i)Perylene	370	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ98

L. Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012616
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL384
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	12	decanted: (Y/N)	N
Concentrated Extract Volume:	500.0 (uL)	Date Extracted:	05/06/95
Injection Volume:	2.0 (uL)	Date Analyzed:	05/13/95
GPC Cleanup:	(Y/N) Y	pH:	8.2
Dilution Factor:			1.0

CONCENTRATION UNITS:
 Number TICs found: 7 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.06	590	BJV
2.	UNKNOWN	10.45	360	BJV
3.	UNKNOWN	11.29	620	J
4.	UNKNOWN ALCOHOL	13.77	330	J
5.	UNKNOWN	16.51	91	J
6. 57103	Hexadecanoic acid	23.79	200	JN
7.	UNKNOWN	28.89	330	J

AV
 5/15/95

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ99

L. Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012617
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	DL385
Level:	(low/med) LOW	Date Received:	05/05/95
% Moisture:	13 decanted: (Y/N) N	Date Extracted:	05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed:	05/13/95
Injection Volume:	2.0 (uL)	Dilution Factor:	1.0
GPC Cleanup:	(Y/N) Y	pH:	8.7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

CAS NO.	COMPOUND	UG/KG	Q
108-95-2-----	Phenol	380	U
111-44-4-----	bis(2-Chloroethyl)Ether	380	U
95-57-8-----	2-Chlorophenol	380	U
541-73-1-----	1,3-Dichlorobenzene	380	U
106-46-7-----	1,4-Dichlorobenzene	380	U
95-50-1-----	1,2-Dichlorobenzene	380	U
95-48-7-----	2-Methylphenol	380	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	380	U
106-44-5-----	4-Methylphenol	380	U
621-64-7-----	N-Nitroso-Di-n-Propylamine	380	U
67-72-1-----	Hexachloroethane	380	U
98-95-3-----	Nitrobenzene	380	U
78-59-1-----	Isophorone	380	U
88-75-5-----	2-Nitrophenol	380	U
105-67-9-----	2,4-Dimethylphenol	380	U
111-91-1-----	bis(2-Chloroethoxy)Methane	380	U
120-83-2-----	2,4-Dichlorophenol	380	U
120-82-1-----	1,2,4-Trichlorobenzene	380	U
91-20-3-----	Naphthalene	380	U
106-47-8-----	4-Chloroaniline	380	U
87-68-3-----	Hexachlorobutadiene	380	U
59-50-7-----	4-Chloro-3-Methylphenol	380	U
91-57-6-----	2-Methylnaphthalene	380	U
77-47-4-----	Hexachlorocyclopentadiene	380	U
88-06-2-----	2,4,6-Trichlorophenol	380	U
95-95-4-----	2,4,5-Trichlorophenol	950	U
91-58-7-----	2-Chloronaphthalene	380	U
88-74-4-----	2-Nitroaniline	950	U
131-11-3-----	Dimethyl Phthalate	380	U
208-96-8-----	Acenaphthylene	380	U
606-20-2-----	2,6-Dinitrotoluene	380	U
99-09-2-----	3-Nitroaniline	950	U
83-32-9-----	Acenaphthene	380	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ99

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012617

Sample wt/vol: 30.0 (g/mL) G

Lab File ID: DL385

Level: (low/med) LOW

Date Received: 05/05/95

% Moisture: 13 decanted: (Y/N) N

Date Extracted: 05/06/95

Concentrated Extract Volume: 500.0 (uL)

Date Analyzed: 05/13/95

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.7

CONCENTRATION UNITS:

CAS NO. COMPOUND (ug/L or ug/Kg) UG/KG Q

51-28-5-----	2,4-Dinitrophenol	950	U
100-02-7-----	4-Nitrophenol	950	U
132-64-9-----	Dibenzofuran	380	U
121-14-2-----	2,4-Dinitrotoluene	380	U
84-66-2-----	Diethylphthalate	380	U
7005-72-3-----	4-Chlorophenyl-phenylether	380	U
86-73-7-----	Fluorene	380	U
100-01-6-----	4-Nitroaniline	950	U
534-52-1-----	4,6-Dinitro-2-Methylphenol	950	U
86-30-6-----	N-Nitrosodiphenylamine (1)	380	U
101-55-3-----	4-Bromophenyl-phenylether	380	U
118-74-1-----	Hexachlorobenzene	380	U
87-86-5-----	Pentachlorophenol	950	U
85-01-8-----	Phenanthrene	22	J
120-12-7-----	Anthracene	380	U
86-74-8-----	Carbazole	380	U
84-74-2-----	Di-n-Butylphthalate	380	U
206-44-0-----	Fluoranthene	24	J
129-00-0-----	Pyrene	380	U
85-68-7-----	Butylbenzylphthalate	380	U
91-94-1-----	3,3'-Dichlorobenzidine	380	U
56-55-3-----	Benzo(a)Anthracene	380	U
218-01-9-----	Chrysene	380	U
117-81-7-----	bis(2-Ethylhexyl) Phthalate	24	J
117-84-0-----	Di-n-Octyl Phthalate	380	U
205-99-2-----	Benzo(b)Fluoranthene	380	U
207-08-9-----	Benzo(k)Fluoranthene	380	U
50-32-8-----	Benzo(a)Pyrene	380	U
193-39-5-----	Indeno(1,2,3-cd) Pyrene	380	U
53-70-3-----	Dibenz(a,h)Anthracene	380	U
191-24-2-----	Benzo(g,h,i)Perylene	380	U

(1) - Cannot be separated from Diphenylamine

1F
 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EXQ99

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.: SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012617
Sample wt/vol:	30.0 (g/mL) G	Lab File ID: DL385
Level: (low/med)	LOW	Date Received: 05/05/95
% Moisture:	13	decanted: (Y/N) N Date Extracted: 05/06/95
Concentrated Extract Volume:	500.0 (uL)	Date Analyzed: 05/13/95
Injection Volume:	2.0 (uL)	Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 8.7	

CONCENTRATION UNITS:
 Number TICs found: 6 (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	10.08	640	BJV
2.	UNKNOWN	10.46	410	BJV
3.	UNKNOWN ALCOHOL	13.77	370	J
4.	UNKNOWN ACID	16.51	86	J
5. 57103	Hexadecanoic acid	23.79	200	JN
6.	UNKNOWN	28.89	380	J

AV
 5-25-95

^{2F}
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

GC Column(1): RTX35

ID: 0.53 (mm)

GC Column(2): RTX5

ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK1	91	83	94	88			0
02	EABE5	96	92	170*	101			1
03	EABE5DL	98	98	123	0D			0
04	EABE6	87	77	107	80			0
05	EABE7	80	72	127	72			0
06	EABF4	84	78	107	67			0
07	EABF5	80	101	214*	45			1
08	EABF6	88	64	152*	72			1
09	EABF7	81	85	152*	141			1
10	EABF7DL	0D	0D	0D	0D			0
11	EABF8	82	76	125	86			0
12	EABF8DL	74	87	133	83			0
13	EABF9	85	84	137	101			0
14	EABF9DL	82	89	163*	0D			1
15	EABG1	84	78	82	74			0
16	EXQ92	144	127	167*	82			1
17	EXQ93	89	77	137	77			0
18	EXQ94	87	74	131	94			0
19	EXQ95	100	87	265*	68			1
20	EXQ96	90	78	158*	76			1
21	EXQ97	80	75	104	104			0
22	EXQ97MS	86	78	123	72			0
23	EXQ97MSD	84	74	101	91			0
24	EXQ98	83	79	84	80			0
25	EXQ99	82	75	84	79			0

QC LIMITS

TCX = Tetrachloro-m-xylene

(30-150)

DCB = Decachlorobiphenyl

(30-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

3F
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix Spike - EPA Sample No.: EXQ97

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane) _____	23.400	0	24.8	106	46-127
Heptachlor _____	23.400	0	23.2	99	35-130
Aldrin _____	23.400	0	28.6	122	34-132
Dieldrin _____	46.900	0	47.4	101	31-134
Endrin _____	46.900	0	51.4	110	42-139
4,4'-DDT _____	46.900	68.1	148	170 *	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
gamma-BHC (Lindane) _____	23.400	23.3	100	6	50	46-127
Heptachlor _____	23.400	22.0	94	5	31	35-130
Aldrin _____	23.400	27.1	116	5	43	34-132
Dieldrin _____	46.900	45.4	97	4	38	31-134
Endrin _____	46.900	49.2	105	5	45	42-139
4,4'-DDT _____	46.900	142	158 *	7	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits

Spike Recovery: 2 out of 12 outside limits

COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK1

L Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Lab Sample ID: B5B0022301 Lab File ID:

Matrix: (soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) N Date Extracted: 05/06/95

Date Analyzed (1): 05/12/95 Date Analyzed (2): 05/12/95

Time Analyzed (1): 1341 Time Analyzed (2): 1341

Instrument ID (1): GC-31 Instrument ID (2): GC-32

GC Column (1): RTX35 ID: 0.53 (mm) GC Column (2): RTX5 ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EABE5	B5012607	05/12/95	05/12/95
02	EABE5DL	B5012607DL	05/12/95	05/12/95
03	EABE6	B5012608	05/13/95	05/13/95
04	EABE7	B5012609	05/13/95	05/13/95
05	EABF4	B5012601	05/13/95	05/13/95
06	EABF5	B5012602	05/13/95	05/13/95
07	EABF6	B5012603	05/13/95	05/13/95
08	EABF7	B5012604	05/12/95	05/12/95
09	EABF7DL	B5012604DL	05/12/95	05/12/95
10	EABF8	B5012605	05/13/95	05/13/95
11	EABF8DL	B5012605DL	05/12/95	05/12/95
12	EABF9	B5012606	05/12/95	05/12/95
13	EABF9DL	B5012606DL	05/12/95	05/12/95
14	EABG1	B5012618	05/12/95	05/12/95
15	EXQ92	B5012610	05/13/95	05/13/95
16	EXQ93	B5012611	05/13/95	05/13/95
17	EXQ94	B5012612	05/13/95	05/13/95
18	EXQ95	B5012613	05/13/95	05/13/95
19	EXQ96	B5012614	05/13/95	05/13/95
20	EXQ97	B5012615	05/13/95	05/13/95
21	EXQ98	B5012616	05/12/95	05/12/95
22	EXQ99	B5012617	05/12/95	05/12/95
23	EXQ97MS	B5012615MS	05/13/95	05/13/95
24	EXQ97MSD	B5012615SD	05/13/95	05/13/95

COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK1

Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.:
Matrix: (soil/water) SOIL		SDG No.: EABE5
Sample wt/vol:	30.0 (g/mL) G	Lab Sample ID: B5B0022301
% Moisture:	decanted: (Y/N)	Lab File ID:
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/12/95
Injection Volume: 1.00 (uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH:	Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6-----	alpha-BHC	1.7	U
319-85-7-----	beta-BHC	1.7	U
319-86-8-----	delta-BHC	1.7	U
58-89-9-----	gamma-BHC (Lindane)	1.7	U
76-44-8-----	Heptachlor	1.7	U
309-00-2-----	Aldrin	1.7	U
1024-57-3-----	Heptachlor epoxide	1.7	U
959-98-8-----	Endosulfan I	1.7	U
60-57-1-----	Dieldrin	3.3	U
72-55-9-----	4,4'-DDE	3.3	U
72-20-8-----	Endrin	3.3	U
33213-65-9-----	Endosulfan II	3.3	U
72-54-8-----	4,4'-DDD	3.3	U
1031-07-8-----	Endosulfan sulfate	3.3	U
50-29-3-----	4,4'-DDT	3.3	U
72-43-5-----	Methoxychlor	17	U
53494-70-5-----	Endrin ketone	3.3	U
7421-93-4-----	Endrin aldehyde	3.3	U
5103-71-9-----	alpha-Chlordane	1.7	U
5103-74-2-----	gamma-Chlordane	1.7	U
8001-35-2-----	Toxaphene	170	U
12674-11-2-----	Aroclor-1016	33	U
11104-28-2-----	Aroclor-1221	67	U
11141-16-5-----	Aroclor-1232	33	U
53469-21-9-----	Aroclor-1242	33	U
12672-29-6-----	Aroclor-1248	33	U
11097-69-1-----	Aroclor-1254	33	U
11096-82-5-----	Aroclor-1260	33	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: RECRA ENVIRON

Contract: 68D50010

EABE5

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012607

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 20 decanted: (Y/N) N Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 7.3 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
319-84-6-----	alpha-BHC	21	U	
319-85-7-----	beta-BHC	21	U	
319-86-8-----	delta-BHC	21	U	
58-89-9-----	gamma-BHC (Lindane)	21	U	
76-44-8-----	Heptachlor	29		
309-00-2-----	Aldrin	21	U	
1024-57-3-----	Heptachlor epoxide	400	P E	
959-98-8-----	Endosulfan I	21	U	
60-57-1-----	Dieldrin	41	U	
72-55-9-----	4,4'-DDE	17	JP	
72-20-8-----	Endrin	41	U	
33213-65-9-----	Endosulfan II	41	U	
72-54-8-----	4,4'-DDD	25	JP	
1031-07-8-----	Endosulfan sulfate	4.3	JP	
50-29-3-----	4,4'-DDT	62	P	
72-43-5-----	Methoxychlor	210	U	
53494-70-5-----	Endrin ketone	41	U	
7421-93-4-----	Endrin aldehyde	41	U	
5103-71-9-----	alpha-Chlordane	900	P E	
5103-74-2-----	gamma-Chlordane	670	P E	
8001-35-2-----	Toxaphene	2100	U	
12674-11-2-----	Aroclor-1016	410	U	
11104-28-2-----	Aroclor-1221	840	U	
11141-16-5-----	Aroclor-1232	410	U	
53469-21-9-----	Aroclor-1242	410	U	
12672-29-6-----	Aroclor-1248	410	U	
11097-69-1-----	Aroclor-1254	410	U	
11096-82-5-----	Aroclor-1260	410	U	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE5DL

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012607DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 20

decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 100

GPC Cleanup: (Y/N) Y

pH: 7.3

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg)	UG/KG
319-84-6-----	alpha-BHC	210	U
319-85-7-----	beta-BHC	210	U
319-86-8-----	delta-BHC	210	U
58-89-9-----	gamma-BHC (Lindane)	210	U
76-44-8-----	Heptachlor	26	DJP
309-00-2-----	Aldrin	210	U
1024-57-3-----	Heptachlor epoxide	490	D
959-98-8-----	Endosulfan I	210	U
60-57-1-----	Die�drin	410	U
72-55-9-----	4,4'-DDE	410	U
72-20-8-----	Endrin	410	U
33213-65-9-----	Endosulfan II	410	U
72-54-8-----	4,4'-DDD	410	U
1031-07-8-----	Endosulfan sulfate	410	U
50-29-3-----	4,4'-DDT	54	DJP
72-43-5-----	Methoxychlor	2100	U
53494-70-5-----	Endrin ketone	410	U
7421-93-4-----	Endrin aldehyde	410	U
5103-71-9-----	alpha-Chlordane	1200	D
5103-74-2-----	gamma-Chlordane	830	D
8001-35-2-----	Toxaphene	21000	U
12674-11-2-----	Aroclor-1016	4100	U
11104-28-2-----	Aroclor-1221	8400	U
11141-16-5-----	Aroclor-1232	4100	U
53469-21-9-----	Aroclor-1242	4100	U
12672-29-6-----	Aroclor-1248	4100	U
11097-69-1-----	Aroclor-1254	4100	U
11096-82-5-----	Aroclor-1260	4100	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE6

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012608

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 13 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.5

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

319-84-6-----alpha-BHC	2.0	U
319-85-7-----beta-BHC	2.0	U
319-86-8-----delta-BHC	2.0	U
58-89-9-----gamma-BHC (Lindane)	2.0	U
76-44-8-----Heptachlor	2.0	U
309-00-2-----Aldrin	1.2	JP
1024-57-3-----Heptachlor epoxide	2.4	P
959-98-8-----Endosulfan I	2.0	U
60-57-1-----Dieldrin	3.8	U
72-55-9-----4,4'-DDE	3.6	JP
72-20-8-----Endrin	8.1	
33213-65-9-----Endosulfan II	3.8	U
72-54-8-----4,4'-DDD	3.8	U
1031-07-8-----Endosulfan sulfate	1.4	JP
50-29-3-----4,4'-DDT	3.2	JP
72-43-5-----Methoxychlor	20	U
53494-70-5-----Endrin ketone	0.85	JP
7421-93-4-----Endrin aldehyde	3.8	U
5103-71-9-----alpha-Chlordane	1.7	JP
5103-74-2-----gamma-Chlordane	0.52	JP
8001-35-2-----Toxaphene	200	U
12674-11-2-----Aroclor-1016	38	U
11104-28-2-----Aroclor-1221	77	U
11141-16-5-----Aroclor-1232	38	U
53469-21-9-----Aroclor-1242	38	U
12672-29-6-----Aroclor-1248	38	U
11097-69-1-----Aroclor-1254	19	JP
11096-82-5-----Aroclor-1260	35	JP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABE7

Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.:
Matrix: (soil/water) SOIL		Lab Sample ID: B5012609
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:
% Moisture: 13	decanted: (Y/N) N	Date Received: 05/05/95
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/13/95
Injection Volume: 1.00 (uL)		Dilution Factor: 4.00
GPC Cleanup: (Y/N) Y	pH: 7.9	Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
319-84-6-----	alpha-BHC	7.8	U	
319-85-7-----	beta-BHC	7.8	U	
319-86-8-----	delta-BHC	7.8	U	
58-89-9-----	gamma-BHC (Lindane)	7.8	U	
76-44-8-----	Heptachlor	7.8	U	
309-00-2-----	Aldrin	7.8	U	
1024-57-3-----	Heptachlor epoxide	1.0	JP	
959-98-8-----	Endosulfan I	6.8	JP	
60-57-1-----	Dieldrin	15	U	
72-55-9-----	4,4'-DDE	14	JP	
72-20-8-----	Endrin	15	U	
33213-65-9-----	Endosulfan II	15	U	
72-54-8-----	4,4'-DDD	15	U	
1031-07-8-----	Endosulfan sulfate	2.4	JP	
50-29-3-----	4,4'-DDT	30		
72-43-5-----	Methoxychlor	78	U	
53494-70-5-----	Endrin ketone	15	U	
7421-93-4-----	Endrin aldehyde	15	U	
5103-71-9-----	alpha-Chlordane	6.4	JP	
5103-74-2-----	gamma-Chlordane	2.6	JP	
8001-35-2-----	Toxaphene	780	U	
12674-11-2-----	Aroclor-1016	150	U	
11104-28-2-----	Aroclor-1221	310	U	
11141-16-5-----	Aroclor-1232	150	U	
53469-21-9-----	Aroclor-1242	150	U	
12672-29-6-----	Aroclor-1248	150	U	
11097-69-1-----	Aroclor-1254	200	P	
11096-82-5-----	Aroclor-1260	85	JP	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF4

I Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID:	B5012601
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture: 28	decanted: (Y/N) N	Date Received:	05/05/95
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted:	05/06/95
Concentrated Extract Volume:	5000 (uL)	Date Analyzed:	05/13/95
Injection Volume: 1.00 (uL)		Dilution Factor:	2.0
GPC Cleanup: (Y/N) Y	pH: 7.3	Sulfur Cleanup: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	UG/KG	Q
319-84-6-----	alpha-BHC	4.7	U	
319-85-7-----	beta-BHC	4.7	U	
319-86-8-----	delta-BHC	4.7	U	
58-89-9-----	gamma-BHC (Lindane)	4.7	U	
76-44-8-----	Heptachlor	4.7	U	
309-00-2-----	Aldrin	4.7	U	
1024-57-3-----	Heptachlor epoxide	2.9	JP	
959-98-8-----	Endosulfan I	4.7	U	
60-57-1-----	Dieldrin	9.2	U	
72-55-9-----	4,4'-DDE	70		
72-20-8-----	Endrin	9.2	U	
33213-65-9-----	Endosulfan II	9.2	U	
72-54-8-----	4,4'-DDD	1.8	JP	
1031-07-8-----	Endosulfan sulfate	7.4	JP	
50-29-3-----	4,4'-DDT	130		
72-43-5-----	Methoxychlor	47	U	
53494-70-5-----	Endrin ketone	9.2	U	
7421-93-4-----	Endrin aldehyde	9.2	U	
5103-71-9-----	alpha-Chlordane	2.9	JP	
5103-74-2-----	gamma-Chlordane	0.94	JP	
8001-35-2-----	Toxaphene	470	U	
12674-11-2-----	Aroclor-1016	92	U	
11104-28-2-----	Aroclor-1221	190	U	
11141-16-5-----	Aroclor-1232	92	U	
53469-21-9-----	Aroclor-1242	92	U	
12672-29-6-----	Aroclor-1248	92	U	
11097-69-1-----	Aroclor-1254	39	JP	
11096-82-5-----	Aroclor-1260	99	P	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF5

1 Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012602

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 9 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 8.2

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
319-84-6-----	alpha-BHC	7.5	U	
319-85-7-----	beta-BHC	7.5	U	
319-86-8-----	delta-BHC	7.5	U	
58-89-9-----	gamma-BHC (Lindane)	7.5	U	
76-44-8-----	Heptachlor	7.5	U	
309-00-2-----	Aldrin	7.5	U	
1024-57-3-----	Heptachlor epoxide	15		
959-98-8-----	Endosulfan I	7.5	U	
60-57-1-----	Dieldrin	15	U	
72-55-9-----	4,4'-DDE	5.3	JP	
72-20-8-----	Endrin	15	U	
33213-65-9-----	Endosulfan II	15	U	
72-54-8-----	4,4'-DDD	15	U	
1031-07-8-----	Endosulfan sulfate	9.1	JP	
50-29-3-----	4,4'-DDT	40		
72-43-5-----	Methoxychlor	75	U	
53494-70-5-----	Endrin ketone	7.8	JP	
7421-93-4-----	Endrin aldehyde	15	U	
5103-71-9-----	alpha-Chlordane	7.5	U	
5103-74-2-----	gamma-Chlordane	2.6	JP	
8001-35-2-----	Toxaphene	750	U	
12674-11-2-----	Aroclor-1016	150	U	
11104-28-2-----	Aroclor-1221	290	U	
11141-16-5-----	Aroclor-1232	150	U	
53469-21-9-----	Aroclor-1242	150	U	
12672-29-6-----	Aroclor-1248	150	U	
11097-69-1-----	Aroclor-1254	120	JP	
11096-82-5-----	Aroclor-1260	160	P	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF6

1. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012603

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 18 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 4.0

GPC Cleanup: (Y/N) Y pH: 5.9

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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319-84-6-----	alpha-BHC	8.3	U
319-85-7-----	beta-BHC	8.3	U
319-86-8-----	delta-BHC	1.2	JP
58-89-9-----	gamma-BHC (Lindane)	8.3	U
76-44-8-----	Heptachlor	2.5	JP
309-00-2-----	Aldrin	8.3	U
1024-57-3-----	Heptachlor epoxide	3.1	JP
959-98-8-----	Endosulfan I	8.3	U
60-57-1-----	Dieldrin	16	U
72-55-9-----	4,4'-DDE	5.2	JP
72-20-8-----	Endrin	16	U
33213-65-9-----	Endosulfan II	16	U
72-54-8-----	4,4'-DDD	16	U
1031-07-8-----	Endosulfan sulfate	17	
50-29-3-----	4,4'-DDT	16	U
72-43-5-----	Methoxychlor	83	U
53494-70-5-----	Endrin ketone	9.7	JP
7421-93-4-----	Endrin aldehyde	4.8	JP
5103-71-9-----	alpha-Chlordane	8.3	U
5103-74-2-----	gamma-Chlordane	3.3	JP
8001-35-2-----	Toxaphene	830	U
12674-11-2-----	Aroclor-1016	160	U
11104-28-2-----	Aroclor-1221	330	U
11141-16-5-----	Aroclor-1232	160	U
53469-21-9-----	Aroclor-1242	160	U
12672-29-6-----	Aroclor-1248	160	U
11097-69-1-----	Aroclor-1254	160	JP
11096-82-5-----	Aroclor-1260	83	JP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7

Lab Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012604

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 22 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: 6.8

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
---------	----------	-----------------	-------	---

319-84-6-----	alpha-BHC	22	U
319-85-7-----	beta-BHC	22	U
319-86-8-----	delta-BHC	22	U
58-89-9-----	gamma-BHC (Lindane)	22	U
76-44-8-----	Heptachlor	140	P
309-00-2-----	Aldrin	22	U
1024-57-3-----	Heptachlor epoxide	440	PE
959-98-8-----	Endosulfan I	22	U
60-57-1-----	Dieldrin	42	U
72-55-9-----	4,4'-DDE	42	U
72-20-8-----	Endrin	42	U
33213-65-9-----	Endosulfan II	42	U
72-54-8-----	4,4'-DDD	34	JP
1031-07-8-----	Endosulfan sulfate	42	U
50-29-3-----	4,4'-DDT	42	U
72-43-5-----	Methoxychlor	220	U
53494-70-5-----	Endrin ketone	42	U
7421-93-4-----	Endrin aldehyde	42	U
5103-71-9-----	alpha-Chlordane	1200	PE
5103-74-2-----	gamma-Chlordane	950	PE
8001-35-2-----	Toxaphene	2200	U
12674-11-2-----	Aroclor-1016	420	U
11104-28-2-----	Aroclor-1221	860	U
11141-16-5-----	Aroclor-1232	420	U
53469-21-9-----	Aroclor-1242	420	U
12672-29-6-----	Aroclor-1248	420	U
11097-69-1-----	Aroclor-1254	420	U
11096-82-5-----	Aroclor-1260	420	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF7DL

1 Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012604DL	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture: 22	decanted: (Y/N) N	Date Received: 05/05/95	
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95	
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/12/95	
Injection Volume: 1.00 (uL)		Dilution Factor: 100	
GPC Cleanup: (Y/N) Y	pH: 6.8	Sulfur Cleanup: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6-----alpha-BHC		220	U
319-85-7-----beta-BHC		220	U
319-86-8-----delta-BHC		220	U
58-89-9-----gamma-BHC (Lindane)		220	U
76-44-8-----Heptachlor		130	DJ
309-00-2-----Aldrin		220	U
1024-57-3-----Heptachlor epoxide		560	D
959-98-8-----Endosulfan I		220	U
60-57-1-----Dieldrin		420	U
72-55-9-----4,4'-DDE		420	U
72-20-8-----Endrin		420	U
33213-65-9-----Endosulfan II		420	U
72-54-8-----4,4'-DDD		420	U
1031-07-8-----Endosulfan sulfate		420	U
50-29-3-----4,4'-DDT		420	U
72-43-5-----Methoxychlor		2200	U
53494-70-5-----Endrin ketone		420	U
7421-93-4-----Endrin aldehyde		420	U
5103-71-9-----alpha-Chlordane		1500	D
5103-74-2-----gamma-Chlordane		1200	DP
8001-35-2-----Toxaphene		22000	U
12674-11-2-----Aroclor-1016		4200	U
11104-28-2-----Aroclor-1221		8600	U
11141-16-5-----Aroclor-1232		4200	U
53469-21-9-----Aroclor-1242		4200	U
12672-29-6-----Aroclor-1248		4200	U
11097-69-1-----Aroclor-1254		4200	U
11096-82-5-----Aroclor-1260		4200	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

La Name:	RECRA ENVIRON	Contract:	68D50010
Lab Code:	RECMD	Case No.:	23525
Matrix:	(soil/water) SOIL	Lab Sample ID:	B5012605
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture:	17	decanted: (Y/N)	N
Extraction:	(SepF/Cont/Sonc)	SONC	Date Received: 05/05/95
Concentrated Extract Volume:	5000 (uL)	Date Extracted:	05/06/95
Injection Volume:	1.00 (uL)	Date Analyzed:	05/13/95
GPC Cleanup:	(Y/N) Y	pH:	7.4
		Dilution Factor:	2.0
		Sulfur Cleanup:	(Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

319-84-6-----alpha-BHC	4.1	U
319-85-7-----beta-BHC	4.1	U
319-86-8-----delta-BHC	4.1	U
58-89-9-----gamma-BHC (Lindane)	4.1	U
76-44-8-----Heptachlor	1.2	JP
309-00-2-----Aldrin	4.1	U
1024-57-3-----Heptachlor epoxide	38	
959-98-8-----Endosulfan I	4.1	U
60-57-1-----Dieldrin	7.8	JP
72-55-9-----4,4'-DDE	47	
72-20-8-----Endrin	8.0	U
33213-65-9-----Endosulfan II	8.0	U
72-54-8-----4,4'-DDD	5.9	J
1031-07-8-----Endosulfan sulfate	3.6	JP
50-29-3-----4,4'-DDT	60	
72-43-5-----Methoxychlor	41	U
53494-70-5-----Endrin ketone	8.0	U
7421-93-4-----Endrin aldehyde	8.0	U
5103-71-9-----alpha-Chlordane	130	E
5103-74-2-----gamma-Chlordane	75	P E
8001-35-2-----Toxaphene	410	U
12674-11-2-----Aroclor-1016	80	U
11104-28-2-----Aroclor-1221	160	U
11141-16-5-----Aroclor-1232	80	U
53469-21-9-----Aroclor-1242	80	U
12672-29-6-----Aroclor-1248	80	U
11097-69-1-----Aroclor-1254	80	U
11096-82-5-----Aroclor-1260	56	JP

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF8DL

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012605DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 17 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 20.0

GPC Cleanup: (Y/N) Y pH: 7.4

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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319-84-6-----	alpha-BHC	41	U	
319-85-7-----	beta-BHC	41	U	
319-86-8-----	delta-BHC	41	U	
58-89-9-----	gamma-BHC (Lindane)	41	U	
76-44-8-----	Heptachlor	41	U	
309-00-2-----	Aldrin	41	U	
1024-57-3-----	Heptachlor epoxide	41	D	
959-98-8-----	Endosulfan I	41	U	
60-57-1-----	Dieldrin	10	DJ	
72-55-9-----	4,4'-DDE	37	DJP	
72-20-8-----	Endrin	80	U	
33213-65-9-----	Endosulfan II	80	U	
72-54-8-----	4,4'-DDD	80	U	
1031-07-8-----	Endosulfan sulfate	3.4	DJP	
50-29-3-----	4,4'-DDT	59	DJ	
72-43-5-----	Methoxychlor	410	U	
53494-70-5-----	Endrin ketone	80	U	
7421-93-4-----	Endrin aldehyde	80	U	
5103-71-9-----	alpha-Chlordane	160	D	
5103-74-2-----	gamma-Chlordane	86	DP	
8001-35-2-----	Toxaphene	4100	U	
12674-11-2-----	Aroclor-1016	800	U	
11104-28-2-----	Aroclor-1221	1600	U	
11141-16-5-----	Aroclor-1232	800	U	
53469-21-9-----	Aroclor-1242	800	U	
12672-29-6-----	Aroclor-1248	800	U	
11097-69-1-----	Aroclor-1254	800	U	
11096-82-5-----	Aroclor-1260	800	U	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9

L. Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012606

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 25 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC

Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 5.0

GPC Cleanup: (Y/N) Y pH: 7.0

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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319-84-6-----	alpha-BHC	11	U
319-85-7-----	beta-BHC	11	U
319-86-8-----	delta-BHC	11	U
58-89-9-----	gamma-BHC (Lindane)	11	U
76-44-8-----	Heptachlor	4.8	JP
309-00-2-----	Aldrin	11	U
1024-57-3-----	Heptachlor epoxide	190	E
959-98-8-----	Endosulfan I	11	U
60-57-1-----	Dieldrin	25	
72-55-9-----	4,4'-DDE	14	JP
72-20-8-----	Endrin	22	U
33213-65-9-----	Endosulfan II	22	U
72-54-8-----	4,4'-DDD	8.6	JP
1031-07-8-----	Endosulfan sulfate	22	U
50-29-3-----	4,4'-DDT	30	
72-43-5-----	Methoxychlor	110	U
53494-70-5-----	Endrin ketone	22	U
7421-93-4-----	Endrin aldehyde	22	U
5103-71-9-----	alpha-Chlordane	320	E
5103-74-2-----	gamma-Chlordane	110	P
8001-35-2-----	Toxaphene	1100	U
12674-11-2-----	Aroclor-1016	220	U
11104-28-2-----	Aroclor-1221	450	U
11141-16-5-----	Aroclor-1232	220	U
53469-21-9-----	Aroclor-1242	220	U
12672-29-6-----	Aroclor-1248	220	U
11097-69-1-----	Aroclor-1254	220	U
11096-82-5-----	Aroclor-1260	220	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABF9DL

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012606DL

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 25

decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y

pH: 7.0

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

319-84-6-----alpha-BHC	110	U
319-85-7-----beta-BHC	110	U
319-86-8-----delta-BHC	110	U
58-89-9-----gamma-BHC (Lindane)	110	U
76-44-8-----Heptachlor	110	U
309-00-2-----Aldrin	110	U
1024-57-3-----Heptachlor epoxide	190	DP
959-98-8-----Endosulfan I	110	U
60-57-1-----Dieldrin	220	U
72-55-9-----4,4'-DDE	12	DJP
72-20-8-----Endrin	220	U
33213-65-9-----Endosulfan II	220	U
72-54-8-----4,4'-DDD	220	U
1031-07-8-----Endosulfan sulfate	220	U
50-29-3-----4,4'-DDT	23	DJP
72-43-5-----Methoxychlor	1100	U
53494-70-5-----Endrin ketone	220	U
7421-93-4-----Endrin aldehyde	220	U
5103-71-9-----alpha-Chlordane	350	D
5103-74-2-----gamma-Chlordane	160	D
8001-35-2-----Toxaphene	11000	U
12674-11-2-----Aroclor-1016	2200	U
11104-28-2-----Aroclor-1221	4500	U
11141-16-5-----Aroclor-1232	2200	U
53469-21-9-----Aroclor-1242	2200	U
12672-29-6-----Aroclor-1248	2200	U
11097-69-1-----Aroclor-1254	2200	U
11096-82-5-----Aroclor-1260	2200	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EABG1

L. Name: RECRA ENVIRON Contract: 68D50010

Lab Code: RECMD Case No.: 23525 SAS No.: SDG No.: EABE5

Matrix: (soil/water) SOIL Lab Sample ID: B5012618

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 13 decanted: (Y/N) N Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 05/06/95

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 8.3 Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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319-84-6-----	alpha-BHC	2.0	U
319-85-7-----	beta-BHC	2.0	U
319-86-8-----	delta-BHC	0.38	JP
58-89-9-----	gamma-BHC (Lindane)	2.0	U
76-44-8-----	Heptachlor	2.0	U
309-00-2-----	Aldrin	2.0	U
1024-57-3-----	Heptachlor epoxide	0.22	JP
959-98-8-----	Endosulfan I	2.0	U
60-57-1-----	Dieldrin	3.8	U
72-55-9-----	4,4'-DDE	3.8	U
72-20-8-----	Endrin	3.8	U
33213-65-9-----	Endosulfan II	3.8	U
72-54-8-----	4,4'-DDD	3.8	U
1031-07-8-----	Endosulfan sulfate	3.8	U
50-29-3-----	4,4'-DDT	3.8	U
72-43-5-----	Methoxychlor	20	U
53494-70-5-----	Endrin ketone	0.39	JP
7421-93-4-----	Endrin aldehyde	3.8	U
5103-71-9-----	alpha-Chlordane	2.0	U
5103-74-2-----	gamma-Chlordane	2.0	U
8001-35-2-----	Toxaphene	200	U
12674-11-2-----	Aroclor-1016	38	U
11104-28-2-----	Aroclor-1221	77	U
11141-16-5-----	Aroclor-1232	38	U
53469-21-9-----	Aroclor-1242	38	U
12672-29-6-----	Aroclor-1248	38	U
11097-69-1-----	Aroclor-1254	38	U
11096-82-5-----	Aroclor-1260	38	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ92

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012610

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 24 decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y

pH: 6.2

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
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319-84-6-----	alpha-BHC	4.5	U
319-85-7-----	beta-BHC	4.5	U
319-86-8-----	delta-BHC	4.5	U
58-89-9-----	gamma-BHC (Lindane)	4.5	U
76-44-8-----	Heptachlor	4.5	U
309-00-2-----	Aldrin	4.5	U
1024-57-3-----	Heptachlor epoxide	5.7	
959-98-8-----	Endosulfan I	4.5	U
60-57-1-----	Dieldrin	2.9	JP
72-55-9-----	4, 4'-DDE	13	
72-20-8-----	Endrin	8.7	U
33213-65-9-----	Endosulfan II	8.7	U
72-54-8-----	4, 4'-DDD	8.7	U
1031-07-8-----	Endosulfan sulfate	10	P
50-29-3-----	4, 4'-DDT	36	
72-43-5-----	Methoxychlor	45	U
53494-70-5-----	Endrin ketone	2.9	JP
7421-93-4-----	Endrin aldehyde	8.7	U
5103-71-9-----	alpha-Chlordane	4.5	U
5103-74-2-----	gamma-Chlordane	2.7	JP
8001-35-2-----	Toxaphene	450	U
12674-11-2-----	Aroclor-1016	87	U
11104-28-2-----	Aroclor-1221	180	U
11141-16-5-----	Aroclor-1232	87	U
53469-21-9-----	Aroclor-1242	87	U
12672-29-6-----	Aroclor-1248	87	U
11097-69-1-----	Aroclor-1254	87	U
11096-82-5-----	Aroclor-1260	87	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ93

I Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012611

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 25

decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 7.3

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
319-84-6-----	alpha-BHC	2.3	U	
319-85-7-----	beta-BHC	2.3	U	
319-86-8-----	delta-BHC	2.3	U	
58-89-9-----	gamma-BHC (Lindane)	2.3	U	
76-44-8-----	Heptachlor	0.62	J	
309-00-2-----	Aldrin	3.0	P	
1024-57-3-----	Heptachlor epoxide	8.1	P	
959-98-8-----	Endosulfan I	2.3	U	
60-57-1-----	Die�drin	4.4	U	
72-55-9-----	4,4'-DDE	11		
72-20-8-----	Endrin	4.4	U	
33213-65-9-----	Endosulfan II	4.4	U	
72-54-8-----	4,4'-DDD	1.5	JP	
1031-07-8-----	Endosulfan sulfate	5.1	P	
50-29-3-----	4,4'-DDT	18	P	
72-43-5-----	Methoxychlor	23	U	
53494-70-5-----	Endrin ketone	2.1	JP	
7421-93-4-----	Endrin aldehyde	4.4	U	
5103-71-9-----	alpha-Chlordane	2.3	U	
5103-74-2-----	gamma-Chlordane	2.3	U	
8001-35-2-----	Toxaphene	230	U	
12674-11-2-----	Aroclor-1016	44	U	
11104-28-2-----	Aroclor-1221	89	U	
11141-16-5-----	Aroclor-1232	44	U	
53469-21-9-----	Aroclor-1242	44	U	
12672-29-6-----	Aroclor-1248	44	U	
11097-69-1-----	Aroclor-1254	44	U	
11096-82-5-----	Aroclor-1260	44	U	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ94

L Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL		Lab Sample ID: B5012612	
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture: 23	decanted: (Y/N) N	Date Received: 05/05/95	
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95	
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/13/95	
Injection Volume: 1.00 (uL)		Dilution Factor: 2.0	
GPC Cleanup: (Y/N) Y	pH: 7.1	Sulfur Cleanup: (Y/N) N	

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Q	
319-84-6-----	alpha-BHC	4.4	U
319-85-7-----	beta-BHC	4.4	U
319-86-8-----	delta-BHC	4.4	U
58-89-9-----	gamma-BHC (Lindane)	4.4	U
76-44-8-----	Heptachlor	4.4	U
309-00-2-----	Aldrin	4.3	JP
1024-57-3-----	Heptachlor epoxide	5.7	P
959-98-8-----	Endosulfan I	4.4	U
60-57-1-----	Dieldrin	14	P
72-55-9-----	4,4'-DDE	29	
72-20-8-----	Endrin	8.6	U
33213-65-9-----	Endosulfan II	8.6	U
72-54-8-----	4,4'-DDD	3.3	JP
1031-07-8-----	Endosulfan sulfate	6.7	JP
50-29-3-----	4,4'-DDT	53	P
72-43-5-----	Methoxychlor	44	U
53494-70-5-----	Endrin ketone	8.6	U
7421-93-4-----	Endrin aldehyde	8.6	U
5103-71-9-----	alpha-Chlordane	3.1	JP
5103-74-2-----	gamma-Chlordane	2.3	JP
8001-35-2-----	Toxaphene	440	U
12674-11-2-----	Aroclor-1016	86	U
11104-28-2-----	Aroclor-1221	170	U
11141-16-5-----	Aroclor-1232	86	U
53469-21-9-----	Aroclor-1242	86	U
12672-29-6-----	Aroclor-1248	86	U
11097-69-1-----	Aroclor-1254	86	U
11096-82-5-----	Aroclor-1260	86	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ95

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.:
Matrix: (soil/water) SOIL		Lab Sample ID: B5012613
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:
% Moisture: 23	decanted: (Y/N) N	Date Received: 05/05/95
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/13/95
Injection Volume: 1.00 (uL)		Dilution Factor: 4.0
GPC Cleanup: (Y/N) Y	pH: 7.3	Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

319-84-6-----alpha-BHC	8.8	U
319-85-7-----beta-BHC	8.8	U
319-86-8-----delta-BHC	8.8	U
58-89-9-----gamma-BHC (Lindane)	8.8	U
76-44-8-----Heptachlor	8.8	U
309-00-2-----Aldrin	8.8	U
1024-57-3-----Heptachlor epoxide	24	P
959-98-8-----Endosulfan I	8.8	U
60-57-1-----Dieldrin	17	U
72-55-9-----4,4'-DDE	17	JP
72-20-8-----Endrin	17	U
33213-65-9-----Endosulfan II	17	U
72-54-8-----4,4'-DDD	2.1	JP
1031-07-8-----Endosulfan sulfate	8.7	JP
50-29-3-----4,4'-DDT	28	
72-43-5-----Methoxychlor	88	U
53494-70-5-----Endrin ketone	4.7	JP
7421-93-4-----Endrin aldehyde	17	U
5103-71-9-----alpha-Chlordane	8.8	U
5103-74-2-----gamma-Chlordane	8.8	U
8001-35-2-----Toxaphene	880	U
12674-11-2-----Aroclor-1016	170	U
11104-28-2-----Aroclor-1221	350	U
11141-16-5-----Aroclor-1232	170	U
53469-21-9-----Aroclor-1242	170	U
12672-29-6-----Aroclor-1248	170	U
11097-69-1-----Aroclor-1254	170	U
11096-82-5-----Aroclor-1260	170	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ96

L Name: RECRA ENVIRON	Contract: 68D50010		
Lab Code: RECMD	Case No.: 23525	SAS No.:	SDG No.: EABE5
Matrix: (soil/water) SOIL	Lab Sample ID: B5012614		
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:	
% Moisture: 23	decanted: (Y/N) N	Date Received: 05/05/95	
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95	
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/13/95	
Injection Volume: 1.00 (uL)		Dilution Factor: 2.0	
GPC Cleanup: (Y/N) Y	pH: 7.2	Sulfur Cleanup: (Y/N) N	

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG Q

319-84-6-----alpha-BHC	4.4	U
319-85-7-----beta-BHC	4.4	U
319-86-8-----delta-BHC	4.4	U
58-89-9-----gamma-BHC (Lindane)	4.4	U
76-44-8-----Heptachlor	4.4	U
309-00-2-----Aldrin	4.4	U
1024-57-3-----Heptachlor epoxide	19	P
959-98-8-----Endosulfan I	4.4	U
60-57-1-----Dieldrin	8.6	U
72-55-9-----4,4'-DDE	11	P
72-20-8-----Endrin	8.6	U
33213-65-9-----Endosulfan II	8.6	U
72-54-8-----4,4'-DDD	2.0	J
1031-07-8-----Endosulfan sulfate	4.9	JP
50-29-3-----4,4'-DDT	19	
72-43-5-----Methoxychlor	44	U
53494-70-5-----Endrin ketone	4.1	JP
7421-93-4-----Endrin aldehyde	8.6	U
5103-71-9-----alpha-Chlordane	4.4	U
5103-74-2-----gamma-Chlordane	4.4	U
8001-35-2-----Toxaphene	440	U
12674-11-2-----Aroclor-1016	86	U
11104-28-2-----Aroclor-1221	170	U
11141-16-5-----Aroclor-1232	86	U
53469-21-9-----Aroclor-1242	86	U
12672-29-6-----Aroclor-1248	86	U
11097-69-1-----Aroclor-1254	86	U
11096-82-5-----Aroclor-1260	86	U

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PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ97

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012615

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 29

decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/13/95

Injection Volume: 1.00 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) Y

pH: 7.3

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg)	UG/KG	Q
---------	----------	-----------------	-------	---

319-84-6-----	alpha-BHC	4.8	U
319-85-7-----	beta-BHC	4.8	U
319-86-8-----	delta-BHC	4.8	U
58-89-9-----	gamma-BHC (Lindane)	4.8	U
76-44-8-----	Heptachlor	4.8	U
309-00-2-----	Aldrin	4.8	U
1024-57-3-----	Heptachlor epoxide	6.3	P
959-98-8-----	Endosulfan I	4.8	U
60-57-1-----	Dieldrin	9.3	U
72-55-9-----	4,4'-DDE	53	
72-20-8-----	Endrin	9.3	U
33213-65-9-----	Endosulfan II	9.3	U
72-54-8-----	4,4'-DDD	1.3	JP
1031-07-8-----	Endosulfan sulfate	9.6	P
50-29-3-----	4,4'-DDT	68	
72-43-5-----	Methoxychlor	48	U
53494-70-5-----	Endrin ketone	9.3	U
7421-93-4-----	Endrin aldehyde	9.3	U
5103-71-9-----	alpha-Chlordane	4.8	U
5103-74-2-----	gamma-Chlordane	4.8	U
8001-35-2-----	Toxaphene	480	U
12674-11-2-----	Aroclor-1016	93	U
11104-28-2-----	Aroclor-1221	190	U
11141-16-5-----	Aroclor-1232	93	U
53469-21-9-----	Aroclor-1242	93	U
12672-29-6-----	Aroclor-1248	93	U
11097-69-1-----	Aroclor-1254	93	U
11096-82-5-----	Aroclor-1260	93	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ98

L Name: RECRA ENVIRON

Contract: 68D50010

Lab Code: RECMD

Case No.: 23525

SAS No.:

SDG No.: EABE5

Matrix: (soil/water) SOIL

Lab Sample ID: B5012616

Sample wt/vol: 30.0 (g/mL) G

Lab File ID:

% Moisture: 12

decanted: (Y/N) N

Date Received: 05/05/95

Extraction: (SepF/Cont/Sonc)

SONC

Date Extracted: 05/06/95

Concentrated Extract Volume:

5000 (uL)

Date Analyzed: 05/12/95

Injection Volume: 1.00 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y

pH: 8.2

Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

(ug/L or ug/Kg) UG/KG

Q

CAS NO.	COMPOUND			
319-84-6-----	alpha-BHC	1.9	U	
319-85-7-----	beta-BHC	1.9	U	
319-86-8-----	delta-BHC	1.9	U	
58-89-9-----	gamma-BHC (Lindane)	1.9	U	
76-44-8-----	Heptachlor	1.9	U	
309-00-2-----	Aldrin	1.9	U	
1024-57-3-----	Heptachlor epoxide	1.9	U	
959-98-8-----	Endosulfan I	1.9	U	
60-57-1-----	Dieldrin	3.7	U	
72-55-9-----	4,4'-DDE	3.7	U	
72-20-8-----	Endrin	3.7	U	
33213-65-9-----	Endosulfan II	3.7	U	
72-54-8-----	4,4'-DDD	3.7	U	
1031-07-8-----	Endosulfan sulfate	3.7	U	
50-29-3-----	4,4'-DDT	3.7	U	
72-43-5-----	Methoxychlor	19	U	
53494-70-5-----	Endrin ketone	3.7	U	
7421-93-4-----	Endrin aldehyde	3.7	U	
5103-71-9-----	alpha-Chlordane	1.9	U	
5103-74-2-----	gamma-Chlordane	1.9	U	
8001-35-2-----	Toxaphene	190	U	
12674-11-2-----	Aroclor-1016	37	U	
11104-28-2-----	Aroclor-1221	76	U	
11141-16-5-----	Aroclor-1232	37	U	
53469-21-9-----	Aroclor-1242	37	U	
12672-29-6-----	Aroclor-1248	37	U	
11097-69-1-----	Aroclor-1254	37	U	
11096-82-5-----	Aroclor-1260	37	U	

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXQ99

L Name: RECRA ENVIRON	Contract: 68D50010	
Lab Code: RECMD	Case No.: 23525	SAS No.:
Matrix: (soil/water) SOIL		Lab Sample ID: B5012617
Sample wt/vol:	30.0 (g/mL) G	Lab File ID:
% Moisture: 13	decanted: (Y/N) N	Date Received: 05/05/95
Extraction: (SepF/Cont/Sonc)	SONC	Date Extracted: 05/06/95
Concentrated Extract Volume:	5000 (uL)	Date Analyzed: 05/12/95
Injection Volume: 1.00 (uL)		Dilution Factor: 1.0
GPC Cleanup: (Y/N) Y	pH: 8.7	Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NO.	COMPOUND	UG/KG	Q
319-84-6-----	alpha-BHC	2.0	U
319-85-7-----	beta-BHC	2.0	U
319-86-8-----	delta-BHC	2.0	U
58-89-9-----	gamma-BHC (Lindane)	2.0	U
76-44-8-----	Heptachlor	2.0	U
309-00-2-----	Aldrin	2.0	U
1024-57-3-----	Heptachlor epoxide	0.33	J
959-98-8-----	Endosulfan I	2.0	U
60-57-1-----	Dieldrin	3.8	U
72-55-9-----	4,4'-DDE	3.8	U
72-20-8-----	Endrin	3.8	U
33213-65-9-----	Endosulfan II	3.8	U
72-54-8-----	4,4'-DDD	3.8	U
1031-07-8-----	Endosulfan sulfate	3.8	U
50-29-3-----	4,4'-DDT	3.8	U
72-43-5-----	Methoxychlor	20	U
53494-70-5-----	Endrin ketone	3.8	U
7421-93-4-----	Endrin aldehyde	3.8	U
5103-71-9-----	alpha-Chlordane	2.0	U
5103-74-2-----	gamma-Chlordane	2.0	U
8001-35-2-----	Toxaphene	200	U
12674-11-2-----	Aroclor-1016	38	U
11104-28-2-----	Aroclor-1221	77	U
11141-16-5-----	Aroclor-1232	38	U
53469-21-9-----	Aroclor-1242	38	U
12672-29-6-----	Aroclor-1248	38	U
11097-69-1-----	Aroclor-1254	38	U
11096-82-5-----	Aroclor-1260	38	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5/30/95

SUBJECT: Review of Region V CLP Data
Received for Review on 5-15-95

FROM: Dennis Wesolowski, Chief (SQC-14J)
Contract Analytical Services Section

TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: U.S. Steel Wankegan (IL)

CASE NUMBER: 23525 SDG NUMBER: MEZP23

Number and Type of Samples: 18 soils

Sample Numbers: MEZP23 thru -31; -50 thru -52; -72 thru -77

Laboratory: SWOK Hrs. for Review: 2.0
+0.3 T.M.

Following are our findings:

Cadre review.

Inorganic

cc: Regional TPO

NARRATIVE

SITE: U.S. STEEL WAUKEGAN
LABORATORY: SWOK

CASE: 23525
SDG: MEZP23

This is a CADRE review. Following the CADRE review comments, the comments in bold print are from the data reviewer based on the hardcopy of the case.

CRDL Criteria

DC-373: The following inorganic samples are associated with a CRDL standard with low percent recovery.
Hits and non-detects are flagged 'VS'.

Lead
MEZP24, MEZP77

There are no limits or criteria established for the CRDL standard. Therefore, no qualification was made on this basis.

DC-374: The following inorganic samples are associated with a CRDL standard with high percent recovery.
Hits and non-detects are flagged 'VS'.

Selenium
MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP75, MEZP76, MEZP77
PBS01

There are no limits or criteria established for the CRDL standard. Therefore, no qualification was made on this basis.

ICS Criteria

DC-312: The following inorganic samples have elements other than Al, Ca, Fe, and Mg at concentrations higher than 10 ppm that may cause potential interference.
Hits and non-detects are flagged "VS".

Lead
MEZP77

Manganese
MEZP24

There are no qualifications made on this basis.

J. Rollin
5/17/95

DC-314: The following inorganic samples have analytes, not spiked in the interference check sample (ICS) but reported as negative values in the ICS, present at or below the IDL. Interferents were found in the sample at or above concentrations in the ICS, indicating potential false negatives. Non-detects are qualified "UJ".

Antimony

MEZP25, MEZP75, MEZP76

There are no qualifications made on this basis.

LCS Criteria

DC-259: The following inorganic samples are associated with laboratory control samples (LCS) which were not run in the required analytical frequency. Hits and non-detects are flagged "VS".

Aluminum

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Antimony

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74A, MEZP74D, MEZP74S
MEZP75, MEZP76, MEZP77

Arsenic

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Barium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Reviewed by:

J. Redlin
Date: 5/17/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

Beryllium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Cadmium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Calcium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Chromium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Cobalt

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Copper

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Iron

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Reviewed by:

J. Redlin
Date: 5/17/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

Lead

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76

Magnesium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Manganese

MEZP23, MEZP25, MEZP26, MEZP27, MEZP28, MEZP29
MEZP30, MEZP31, MEZP50, MEZP51, MEZP52, MEZP72
MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75, MEZP76
MEZP77

Nickel

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Potassium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Selenium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Silver

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Reviewed by:

J. Redlin

Date: 12/5/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

Sodium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP75, MEZP76
MEZP77

Thallium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Vanadium

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

Zinc

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

The DC-259 frequency defect is a default error which occurs whenever two LCSs are analyzed consecutively for separate analytes. This does not affect the data and does not require qualifications.

Matrix Spike Criteria

INORGANICS

Percent Recovery Limits

Upper	125.0
Lower	75.0
Extreme lower	30.0

Reviewed by:

Date:

5/17/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

DC-268: The following inorganic samples are associated with a matrix spike recovery which is low, indicating that sample results may be biased low.
Hits are qualified "J" and non-detects are qualified "UJ".

Antimony

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74A, MEZP74D, MEZP75
MEZP76, MEZP77

There are no qualifications of the duplicate MEZP74D and the analytical spike MEDF74A for antimony. The antimony data for MEZP23, 25-30, 50-52 and 72-76 are qualified (UJ). The antimony data for MEZP24, 31 and 77 are qualified (J).

Laboratory Blanks Criteria

DC-284: The following inorganic samples are associated with a blank concentration which is greater than the instrument detection limit (IDL). The sample concentration is also greater than the IDL and less than five times the blank concentration.

Hits are qualified "U" and non-detects are not flagged.

MEZP74
Selenium

MEZP74D
Selenium

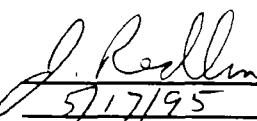
MEZP75
Selenium

MEZP76
Selenium

MEZP77
Selenium

There are no qualifications of the duplicate MEZP74D for selenium. The antimony data for MEZP74-77 are qualified (J). The reviewer qualified MEZP23, 25-31, 50-52 and 72-73 for selenium (J) according to Region 5 guidelines.

Reviewed by:


Date: 5/17/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

DC-338: During review of the following inorganic samples, the reported IDL/default CRDL value was used for cyanide.

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74D, MEZP74S, MEZP75
MEZP76, MEZP77

There are no qualifications made on this basis.

Reviewed by: J. Redlin James Redlin, Lockheed/ESAT
Date: 5/17/95

ESAT-5-041.1

FILENAME: MEZP23 DATE: 05/17/95 TIME: 14:56

CRITERIA FILE: FGDR193

DATA

	Original	X Qualified
QUALIFICATIONS PERFORMED		
X	Quantitation Limit Percent Moisture Holding Time X Calibration X Matrix Spike IPC Internal Standards SMC/Surrogate System Performance	X ICS X LCS X Duplicates X Furnace AA QC X Serial Dilutions X Sample Result Verif. X Laboratory Blanks X Field QC
PRINT NON-DETECTS		
X	Yes	No
PRINT REJECTED RESULTS		
X	Yes	No

TAL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: MEZP23	SITE: LABORATORY: SOUTHWEST LABS OF OKLAHOMA					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT SOLID:	MEZP23 MEZP23	MEZP24 MEZP24	MEZP25 MEZP25	MEZP26 MEZP26	MEZP27 MEZP27	
	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW
	71.9	91.8	81.5	74.7	82.1	
INORG						
Aluminum	9670	5410	6710	10600	9300	
Antimony	0.84 UJ	3.0 J	0.74 UJ	0.80 UJ	0.73 UJ	
Arsenic	9.8	37.1	25.1	10.9	8.7	
Barium	109	143	152	130	89.3	
Beryllium	0.88	0.51	4.1	0.81	0.70	
Cadmium	0.28	0.22	2.1	0.40	0.77	
Calcium	6200	82800	8270	6090	19400	
Chromium	18.9	725	14.6	31.6	57.8	
Cobalt	11.0	5.5	17.7	13.4	11.6	
Copper	32.0	72.6	97.9	37.0	40.2	
Iron	22600	84200	68200	21800	20100	
Lead	136	411	132	186	116	
Magnesium	3840	27000	1800	4250	11700	
Manganese	862	20800	356	887	803	
Mercury	0.14	0.20	0.25	0.18	2.4	
Nickel	22.2	25.9	47.5	24.0	25.0	
Potassium	1650	526	738	890	1090	
Selenium	2.7 J	7.6	4.5 J	2.0 J	1.9 J	
Silver	0.28	0.22	0.24	0.27	0.24	
Sodium	195	397	431	78.7	231	
Thallium	1.5	1.1	1.5	1.3	1.4	
Vanadium	28.3	229	31.1	28.7	24.3	
Zinc	131	272	452	226	184	
Cyanide	0.77	0.54	0.61	0.67	0.61	

FILENAME: MEZP23.SDG DATE: 05/17/95 TIME: 14:56 CADRE 2.10

PAGE: 1

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TAL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: MEZP23	SITE: LABORATORY: SOUTHWEST LABS OF OKLAHOMA					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT SOLID:	MEZP28 MEZP28	MEZP29 MEZP29	MEZP30 MEZP30	MEZP31 MEZP31	MEZP50 MEZP50	
	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW	Routine Sample SOIL/LOW
	75.7	83.2	76.2	87.3	78.5	
INORG						
Aluminum	8040	8810	5840	4330	7640	
Antimony	0.79 UJ	0.72 UJ	0.79 UJ	0.79 J	0.76 UJ	
Arsenic	11.2	10.1	7.8	8.0	10.8	
Barium	95.1	91.2	55.8	145	95.9	
Beryllium	0.71	0.66	0.46	0.44	0.59	
Cadmium	0.55	1.2	0.26	0.96	1.4	
Calcium	5790	17100	12000	56300	14400	
Chromium	45.7	20.5	13.0	15.4	139	
Cobalt	8.9	12.4	8.2	7.2	8.7	
Copper	34.0	37.5	25.5	58.0	45.0	
Iron	17200	19900	15700	13100	18400	
Lead	149	296	77.9	472	201	
Magnesium	3160	10600	7150	27700	6830	
Manganese	487	745	526	583	540	
Mercury	0.22	0.12	0.13	0.14	0.13	
Nickel	18.5	24.2	16.1	14.7	21.4	
Potassium	555	1300	985	862	1430	
Selenium	3.3 J	1.9 J	2.6 J	1.9 J	2.0 J	
Silver	0.26	0.24	0.26	0.23	0.36	
Sodium	238	136	65.2	143	108	
Thallium	1.3	1.2	1.5	1.2	1.3	
Vanadium	22.4	25.3	19.2	15.9	23.4	
Zinc	175	410	124	411	318	
Cyanide	0.66	0.60	0.66	0.57	1.9	

FILENAME: MEZP23.SDG DATE: 05/17/95 TIME: 14:56 CADRE 2.10

PAGE: 2

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TAL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: MEZP23	SITE: LABORATORY: SOUTHWEST LABS OF OKLAHOMA					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT SOLID:	MEZP51 MEZP51	MEZP52 MEZP52	MEZP72 MEZP72	MEZP73 MEZP73	MEZP74 MEZP74	Routine Sample SOIL/LOW
	75.3	75.2	72.7	79.9	70.8	
INORG						
Aluminum	9730	7910	11100	9340	9940	
Antimony	0.80 UJ	0.80 UJ	0.82 UJ	0.75 UJ	0.85 UJ	
Arsenic	11.6	12.7	12.8	8.0	9.6	
Barium	117	144	122	94.1	140	
Beryllium	0.84	0.74	1.1	0.66	0.90	
Cadmium	1.9	1.5	0.28	0.25	0.28	
Calcium	15400	19700	17200	16000	6170	
Chromium	19.4	19.7	21.0	19.0	19.1	
Cobalt	11.3	9.7	11.3	10.5	12.4	
Copper	132	57.0	63.6	29.4	32.8	
Iron	21300	22800	25400	21200	23800	
Lead	614	262	244	116	145	
Magnesium	9560	10100	9510	9320	3780	
Manganese	726	805	772	744	1160	
Mercury	0.18	0.64	0.14	0.12	0.14	
Nickel	23.2	24.3	30.5	20.7	24.2	
Potassium	1280	1180	1930	1810	1780	
Selenium	2.9 J	2.4 J	2.2 J	2.8 J	3.0 J	
Silver	0.27	0.27	0.28	0.25	0.28	
Sodium	82.9	116	185	117	153	
Thallium	1.9	1.3	1.4	1.3	1.4	
Vanadium	27.4	24.5	29.5	25.6	28.4	
Zinc	862	392	330	205	151	
Cyanide	0.66	1.1	0.69	0.63	0.71	

FILENAME: MEZP23.SDG DATE: 05/17/95 TIME: 14:56 CADRE 2.10

PAGE: 3

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TAL QUALIFIED SPREADSHEET						
CASE NO: 23525 SDG NO: MEZP23	SITE: LABORATORY: SOUTHWEST LABS OF OKLAHOMA					
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT SOLID:	MEZP74A Post Digest Spike SOIL/LOW 70.8	MEZP74D Duplicate Sample SOIL/LOW 70.8	MEZP74S Matrix Spike SOIL/LOW 70.8	MEZP75 MEZP75 Routine Sample SOIL/LOW 85.5	MEZP76 MEZP76 Routine Sample SOIL/LOW 86.2	
INORG						
Aluminum		10800 VS		1550		1140
Antimony		0.85 VS	98.3 VS	0.70 UJ	0.70 UJ	
Arsenic		9.8 VS	613 VS	5.7		5.0
Barium		122 VS	770 VS	8.9		6.6
Beryllium		0.95 VS	16.3 VS	0.29		0.23
Cadmium		0.28 VS	14.8 VS	0.23		0.23
Calcium		6000 VS		62100		93900
Chromium		20.0 VS	82.8 VS	5.1		4.4
Cobalt		11.4 VS	161 VS	4.0		2.9
Copper		31.2 VS	116 VS	49.8		18.9
Iron		24500 VS		14600		8420
Lead		146 VS	292 VS	13.5		114
Magnesium		3750 VS		32700		49400
Manganese		909 VS	1090 VS	757		799
Mercury		0.14 U	0.86	0.12		0.12
Nickel		22.9 VS	174 VS	10.5		6.2
Potassium		1880 VS		232		186
Selenium		1.7 VS	602 VS	1.3 J		1.1 J
Silver		0.28 VS	14.8 VS	0.23		0.23
Sodium		166 VS		207		240
Thallium		1.4 VS	577 VS	1.4		1.2
Vanadium		29.9 VS	180 VS	11.6		7.2
Zinc		147 VS	306 VS	169		132
Cyanide		0.71 U	7.3	0.58		0.58

FILENAME: MEZP23.SDG DATE: 05/17/95 TIME: 14:56 CADRE 2.10

PAGE: 4

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

TAL QUALIFIED SPREADSHEET					
CASE NO: 23525 SDG NO: MEZP23		SITE: LABORATORY: SOUTHWEST LABS OF OKLAHOMA			
EPA SAMPLE NUMBER: REGIONAL SAMPLE NUMBER: SAMPLE LOCATION: SAMPLE TYPE: MATRIX/ANALYSIS: DILUTION FACTOR: PERCENT SOLID:	MEZP77 MEZP77 Routine Sample SOIL/LOW 86.5				
INORG					
Aluminum	1310				
Antimony	182	J			
Arsenic	8.3				
Barium	25.3				
Beryllium	0.23				
Cadmium	0.23				
Calcium	58000				
Chromium	13.3				
Cobalt	4.8				
Copper	196				
Iron	48200				
Lead	12600				
Magnesium	31100				
Manganese	978				
Mercury	0.12				
Nickel	16.8				
Potassium	157				
Selenium	2.5	J			
Silver	0.28				
Sodium	153				
Thallium	2.2				
Vanadium	11.0				
Zinc	1240				
Cyanide	0.58				

FILENAME: MEZP23.SDG DATE: 05/17/95 TIME: 14:56 CADRE 2.10

PAGE: 5

Water units are reported in ug/L.
Soil units are reported in ug/Kg.

Holding Time Report

SDG NO: MEZP23
CASE NO: 23525

LABORATORY: SOUTHWEST LAB
AGENCY INPUT FILE: MEZP23.CRI

HOLDING TIME CRITERIA

INORGANICS

-- Holding Time -- ----- pH -----

	Primary	Expanded	Primary	Expanded
--	---------	----------	---------	----------

	-----	-----	-----	-----
--	-------	-------	-------	-------

Metals	180	0	2.0	0.0
Mercury	28	0	2.0	0.0
Cyanide	14	0	12.0	0.0

DC-280: The following inorganic soil samples were reviewed for holding time violations using criteria developed for water samples.

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74A, MEZP74D, MEZP74S
MEZP75, MEZP76, MEZP77

Calibration Report

SDG NO: MEZP23
CASE NO: 23525

LABORATORY: SOUTHWEST LAB
AGENCY INPUT FILE: MEZP23.CRI

CALIBRATION CRITERIA

INORGANICS

Percent Recovery Limits

	--- Primary ---		-- Expanded --	
	Low	High	Low	High
Cyanide	85.00	115.00	70.00	130.00
AA	90.00	110.00	75.00	125.00
TCP	90.00	110.00	75.00	125.00
Mercury	80.00	120.00	65.00	135.00

No problems found for this qualification.

Matrix Spike Report

SDG NO: MEZP23
CASE NO: 23525

LABORATORY: SOUTHWEST LAB
AGENCY INPUT FILE: MEZP23.CRI

MATRIX SPIKE CRITERIA

INORGANICS

Percent Recovery Limits

Upper 125.0
Lower 75.0
Extreme lower 30.0

DC-268: The following inorganic samples are associated with a matrix spike recovery which is low, indicating that sample results may be biased low.

Hits are qualified "J" and non-detects are qualified "UJ".

Antimony

MEZP23, MEZP24, MEZP25, MEZP26, MEZP27, MEZP28
MEZP29, MEZP30, MEZP31, MEZP50, MEZP51, MEZP52
MEZP72, MEZP73, MEZP74, MEZP74A, MEZP74D, MEZP75
MEZP76, MEZP77

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 05-24-95

SUBJECT: Review of Region V CLP Data
Received for Review on 5-15-95

FROM: Dennis Wesolowski, Chief (SQC-14J) L. Finkelberg
Contract Analytical Services Section for D. Wesolowski
TO: Data User: IEPA

We have reviewed the data for the following case:

SITE NAME: U.S. Steel Wankegan (IL)

CASE NUMBER: 23525 SDG NUMBER: MEZP23

Number and Type of Samples: 18 soils

Sample Numbers: MEZP23 thru -31; -50 thru -52; -72 thru -77

Laboratory: SWOK Hrs. for Review: 13.5
10:15 PM

Following are our findings:

The MATRIX SPIKE recovery for Sb is out of control.

The CCB contains Se.

The data are unable to meet the qualifications described in the attached narrative.

L. Finkelberg

05-24-95

Inorganic

cc: Regional TPO

NARRATIVE

SITE: U.S. STEEL WAUKEGAN
LABORATORY: SWOK

CASE: 23525
SDG: MEXP23

The laboratory's portion of case 23525 contains 18 low level soil samples assayed for total metals and total cyanide. The following narrative lists the out of control audits and their possible effects on the results.

EVIDENTIAL AUDIT: All forms are originals. All of the raw data sheets are originals. All photocopies are from bound laboratory notebooks. The original sample tags, Federal Express airbills, chain of custody forms and DC-1 Form are present. All forms are present and in the order indicated on the Form DC-2 [inventory sheet].

ICP ANALYSES: The duplicate RPD for Mn (24.5%) was flagged by the laboratory. The duplicate difference does not exceed the technical criterion (35%) for soil samples. The matrix spike recovery for Mn (-48.0%) was not flagged by the laboratory because the sample concentration was more than 4x the spike level. All Mn data are acceptable.

The duplicate RPD for Se (54.3 %) was not flagged by the laboratory because the duplicate difference does not exceed the technical criterion ($\pm 2 \times CRDL$) for soil samples. The Se data are not qualified on this basis, but are qualified by the CCB audit as stated in the last paragraph of the ICP Analyses section.

The matrix spike recovery for Sb (69.6%) is out of control. The Sb data on MEZP24, 31 and 77 are estimated (J) due to low bias. The Sb data on MEZP23, 25-30, 50-52 and 72-76 are estimated (UJ) due to possible elevation of the detection limit.

The CCB contains Se (4.6 $\mu\text{g/L}$). The Se data on MEZP23, 25-31, 50-52 and 72-77 are estimated (J) due to contamination.

OTHER ANALYSES: All Hg and CN data are acceptable.

Reviewed by:

Date:

J. Redlin

5/19/95

James Redlin, Lockheed/ESAT

ESAT-5-041.1

DATA QUALIFIER DEFINITIONS

For the purpose of defining the flagging nomenclature utilized in this document, the following code letters and associated definitions are provided:

- U** Indicates the material was analyzed, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.
- J** Indicates the associated value is an estimated quantity.
- R** Indicates the data are unusable. (Note: The analyte may or may not be present.)
- UJ** Indicates the material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
- E** Indicates the reported value is estimated because of the presence of interferences. An explanatory note shall be included under Comments on the Cover Page (if the problem applies to all samples) or on the specific FORM I-JN (if it is an isolated problem).
- M** Indicates duplicate injection precision is not met.
- N** ~~Indicates~~ the spike sample recovery is not within control limits.
- S** Indicates the reported value was determined by the Method of Standard Addition (MSA).
- W** Indicates the post-digestion spike for furnace AA analysis is out of control limits (85%-115%), while sample absorbance is less than 50% of the spike absorbance.
- +** Indicates the correlation coefficient for the MSA is less than 0.995.
- *** Indicates the duplicate analysis is not within control limits.

Note: Entering "S", "W" or "+" is mutually exclusive. No combination of these qualifiers can appear in the same field for an analyte.

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

b Name: SOUTHWEST_LAB_OF_OK Contract: 68-D3-0040
 Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.:MEZP23
 SOW No.: ILM03

EPA Sample No.	Lab Sample ID
MEZP23	2213001
MEZP24	2213002
MEZP25	2213003
MEZP26	2213004
MEZP27	2213005
MEZP28	2213006
MEZP29	2213007
MEZP30	2213008
MEZP31	2213009
MEZP50	2213010
MEZP51	2213011
MEZP52	2213012
MEZP72	2213013
MEZP73	2213014
MEZP74	2213015
MEZP74D	2213015D
MEZP74S	2213015S
MEZP75	2213016
MEZP76	2213017
MEZP77	2213018

Were ICP interelement corrections applied ? Yes/No YES

Were ICP background corrections applied ? Yes/No YES

If yes - were raw data generated before application of background corrections ? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:  Name: Jason D. Ruckman
 Date: May 12, 1995 Title: Inorganic Program Manager

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SDG NARRATIVE**RECEIVED**

MAY 15 1995

CONTRACT: 68-D3-0040

DATE: 05/12/95

CASE: 23525

SOW NO.: ~~ILM03.0~~

SDG: MEZP23

CENTRAL REGIONAL LAB.
EPISODE NO.: ~~22930~~ CLARK ST.
CHICAGO, ILLINOIS 60605**INORGANIC METAL FRACTION:**

18 soil samples plus 1 LCS/MS/DUP were submitted for ICP, CN and Hg analysis. The samples' analyses were completed according to SOW ILM03.0.

No major problems occurred during the digestion or analyses of these samples.

Initial and Continuing Calibration Checks: No problems.

Initial and Continuing Calibration Blanks: The following elements showed low level concentrations below the Contract Required Detection Limit in the Calibration Blanks: Fe & Se. No action required.

Linearity near the CRDL (CRA & CRI): The CRI standard was outside of our in-house control limits of 70 - 130%R for the following element: Se. No action required.

Preparation Blanks: No problems.

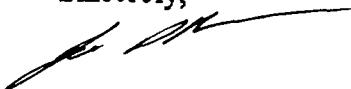
Lab Control Spikes: No problems.

Matrix Spike: The following element was outside the control limits of 70-130% recovery. Sb. All associated samples were flagged with a "N" on Form I's. No action required.

Duplicate: The following element was outside the control limits of 0-20% RPD: Mn. All associated samples were flagged with a "*" on Form I's. No action required.

Serial Dilution (ICP): No problems.

Sincerely,



Jason D. Ruckman
Inorganic Program Manager

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP23

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213001

Level (low/med): LOW Date Received: 05/05/95

% Solids: 71.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9670	-	-	P
7440-36-0	Antimony	0.83	U	N	P
7440-38-2	Arsenic	9.8	-	-	P
7440-39-3	Barium	109	-	-	P
7440-41-7	Beryllium	0.88	B	-	P
7440-43-9	Cadmium	0.28	U	-	P
7440-70-2	Calcium	6200	-	-	P
7440-47-3	Chromium	18.9	-	-	P
7440-48-4	Cobalt	11.0	B	-	P
7440-50-8	Copper	32.0	-	-	P
7439-89-6	Iron	22600	-	-	P
7439-92-1	Lead	136	-	-	P
7439-95-4	Magnesium	3840	-	-	P
7439-96-5	Manganese	862	-	*	P
7439-97-6	Mercury	0.14	U	-	CV
7440-02-0	Nickel	22.2	-	-	P
7440-09-7	Potassium	1650	-	-	P
7440-10-2	Selenium	2.7	-	-	P
7440-22-4	Silver	0.28	U	-	P
7440-23-5	Sodium	195	B	-	P
7440-28-0	Thallium	1.5	B	-	P
7440-62-2	Vanadium	28.3	-	-	P
7440-66-6	Zinc	131	-	-	P
	Cyanide	0.77	-	-	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MEZP24

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213002

Level (low/med): LOW Date Received: 05/05/95

% Solids: 91.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5410	-	P	
7440-36-0	Antimony	3.0	B	N	P
7440-38-2	Arsenic	37.1	-	P	
7440-39-3	Barium	143	-	P	
7440-41-7	Beryllium	0.51	B	P	
7440-43-9	Cadmium	0.22	U	P	
7440-70-2	Calcium	82800	-	P	
7440-47-3	Chromium	725	-	P	
7440-48-4	Cobalt	5.5	B	P	
7440-50-8	Copper	72.6	-	P	
7439-89-6	Iron	84200	-	P	
7439-92-1	Lead	411	-	P	
7439-95-4	Magnesium	27100	-	P	
7439-96-5	Manganese	20800	-	P	
7439-97-6	Mercury	0.20	-	CV	
7440-02-0	Nickel	25.9	-	P	
7440-09-7	Potassium	526	B	P	
7792-10-2	Selenium	7.6	-	P	
7440-22-4	Silver	0.22	U	P	
7440-23-5	Sodium	397	B	P	
7440-28-0	Thallium	1.1	U	P	
7440-62-2	Vanadium	229	-	P	
7440-66-6	Zinc	272	-	P	
	Cyanide	0.54	U	CA	

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP25

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213003

Level (low/med): LOW Date Received: 05/05/95

% Solids: 81.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	6710	-		P
7440-36-0	Antimony	0.74	U	N	P
7440-38-2	Arsenic	25.1	-		P
7440-39-3	Barium	152	-		P
7440-41-7	Beryllium	4.1	-		P
7440-43-9	Cadmium	2.1	-		P
7440-70-2	Calcium	8270	-		P
7440-47-3	Chromium	14.6	-		P
7440-48-4	Cobalt	17.7	-		P
7440-50-8	Copper	97.9	-		P
7439-89-6	Iron	68200	-		P
7439-92-1	Lead	132	-		P
7439-95-4	Magnesium	1800	-		P
7439-96-5	Manganese	356	-	*	P
7439-97-6	Mercury	0.25	-		CV
7440-02-0	Nickel	47.5	-		P
7440-09-7	Potassium	738	B		P
7782-49-2	Selenium	4.5	-		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	431	B		P
7440-28-0	Thallium	1.5	B		P
7440-62-2	Vanadium	31.1	-		P
7440-66-6	Zinc	452	-		P
	Cyanide	0.61	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP26

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213004

Level (low/med): LOW Date Received: 05/05/95

% Solids: 74.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	10600	-	-	P
7440-36-0	Antimony	0.80	U	N	P
7440-38-2	Arsenic	10.9	-	-	P
7440-39-3	Barium	130	-	-	P
7440-41-7	Beryllium	0.81	B	-	P
7440-43-9	Cadmium	0.40	B	-	P
7440-70-2	Calcium	6090	-	-	P
7440-47-3	Chromium	31.6	-	-	P
7440-48-4	Cobalt	13.4	B	-	P
7440-50-8	Copper	37.0	-	-	P
7439-89-6	Iron	21800	-	-	P
7439-92-1	Lead	186	-	-	P
7439-95-4	Magnesium	4250	-	-	P
7439-96-5	Manganese	887	-	*	P
7439-97-6	Mercury	0.18	-	-	CV
7440-02-0	Nickel	24.0	-	-	P
7440-09-7	Potassium	890	B	-	P
7782-10-2	Selenium	2.0	-	-	P
7440-22-4	Silver	0.27	U	-	P
7440-23-5	Sodium	78.7	B	-	P
7440-28-0	Thallium	1.3	U	-	P
7440-62-2	Vanadium	28.7	-	-	P
7440-66-6	Zinc	226	-	-	P
	Cyanide	0.67	U	-	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP27

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213005

Level (low/med): LOW Date Received: 05/05/95

% Solids: 82.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9300	-	P	
7440-36-0	Antimony	0.73	U	N	P
7440-38-2	Arsenic	8.7	-	P	
7440-39-3	Barium	89.3	-	P	
7440-41-7	Beryllium	0.70	B	P	
7440-43-9	Cadmium	0.77	B	P	
7440-70-2	Calcium	19400	-	P	
7440-47-3	Chromium	57.8	-	P	
7440-48-4	Cobalt	11.6	B	P	
7440-50-8	Copper	40.2	-	P	
7439-89-6	Iron	20100	-	P	
7439-92-1	Lead	116	-	P	
7439-95-4	Magnesium	11700	-	P	
7439-96-5	Manganese	803	-	*	P
7439-97-6	Mercury	2.4	-		CV
7440-02-0	Nickel	25.0	-	P	
7440-09-7	Potassium	1090	B	P	
7782-40-2	Selenium	1.9	-	P	
7440-22-4	Silver	0.24	U	P	
7440-23-5	Sodium	231	B	P	
7440-28-0	Thallium	1.4	B	P	
7440-62-2	Vanadium	24.3	-	P	
7440-66-6	Zinc	184	-	P	
	Cyanide	0.61	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP28

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213006

Level (low/med): LOW Date Received: 05/05/95

% Solids: 75.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8040	-		P
7440-36-0	Antimony	0.79	U	N	P
7440-38-2	Arsenic	11.2	-		P
7440-39-3	Barium	95.1	-		P
7440-41-7	Beryllium	0.71	B		P
7440-43-9	Cadmium	0.55	B		P
7440-70-2	Calcium	5790	-		P
7440-47-3	Chromium	45.7	-		P
7440-48-4	Cobalt	8.9	B		P
7440-50-8	Copper	34.0	-		P
7439-89-6	Iron	17200	-		P
7439-92-1	Lead	149	-		P
7439-95-4	Magnesium	3160	-		P
7439-96-5	Manganese	487	-	*	P
7439-97-6	Mercury	0.22	-		CV
7440-02-0	Nickel	18.5	-		P
7440-09-7	Potassium	555	B		P
7782-40-2	Selenium	3.3	-		P
7440-22-4	Silver	0.26	U		P
7440-23-5	Sodium	238	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	22.4	-		P
7440-66-6	Zinc	175	-		P
	Cyanide	0.66	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP29

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213007

Level (low/med): LOW Date Received: 05/05/95

% Solids: 83.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	8810	-	-	P
7440-36-0	Antimony	0.72	U	N	P
7440-38-2	Arsenic	10.1	-	-	P
7440-39-3	Barium	91.2	-	-	P
7440-41-7	Beryllium	0.66	B	-	P
7440-43-9	Cadmium	1.2	B	-	P
7440-70-2	Calcium	17100	-	-	P
7440-47-3	Chromium	20.5	-	-	P
7440-48-4	Cobalt	12.4	-	-	P
7440-50-8	Copper	37.5	-	-	P
7439-89-6	Iron	19900	-	-	P
7439-92-1	Lead	296	-	-	P
7439-95-4	Magnesium	10600	-	-	P
7439-96-5	Manganese	745	-	*	P
7439-97-6	Mercury	0.12	U	-	CV
7440-02-0	Nickel	24.2	-	-	P
7440-09-7	Potassium	1310	-	-	P
7792-40-2	Selenium	1	q	-	P
7440-22-4	Silver	0.24	U	-	P
7440-23-5	Sodium	136	B	-	P
7440-28-0	Thallium	1.2	U	-	P
7440-62-2	Vanadium	25.3	-	-	P
7440-66-6	Zinc	410	-	-	P
	Cyanide	0.60	U	-	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MEZP30

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213008

Level (low/med): LOW Date Received: 05/05/95

% Solids: 76.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5840	-	P	
7440-36-0	Antimony	0.79	U	N	P
7440-38-2	Arsenic	7.8	-	P	
7440-39-3	Barium	55.8	-	P	
7440-41-7	Beryllium	0.46	B	P	
7440-43-9	Cadmium	0.26	U	P	
7440-70-2	Calcium	12000	-	P	
7440-47-3	Chromium	13.0	-	P	
7440-48-4	Cobalt	8.2	B	P	
7440-50-8	Copper	25.5	-	P	
7439-89-6	Iron	15700	-	P	
7439-92-1	Lead	77.9	-	P	
7439-95-4	Magnesium	7150	-	P	
7439-96-5	Manganese	526	-	*	P
7439-97-6	Mercury	0.13	U	CV	
7440-02-0	Nickel	16.1	-	P	
7440-09-7	Potassium	985	B	P	
7782-49-2	Selenium	2.6	-	P	
7440-22-4	Silver	0.26	U	P	
7440-23-5	Sodium	65.2	B	P	
7440-28-0	Thallium	1.5	B	P	
7440-62-2	Vanadium	19.2	-	P	
7440-66-6	Zinc	124	-	P	
	Cyanide	0.66	U	CA	

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

MEZP31

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213009

Level (low/med): LOW Date Received: 05/05/95

% Solids: 87.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4330	-	P	
7440-36-0	Antimony	0.79	B	N	P
7440-38-2	Arsenic	8.0	-	P	
7440-39-3	Barium	145	-	P	
7440-41-7	Beryllium	0.44	B	-	P
7440-43-9	Cadmium	0.96	B	-	P
7440-70-2	Calcium	56300	-	P	
7440-47-3	Chromium	15.4	-	P	
7440-48-4	Cobalt	7.2	B	-	P
7440-50-8	Copper	58.0	-	P	
7439-89-6	Iron	13100	-	P	
7439-92-1	Lead	472	-	P	
7439-95-4	Magnesium	27700	-	P	
7439-96-5	Manganese	583	-	*	P
7439-97-6	Mercury	0.14	-	CV	
7440-02-0	Nickel	14.7	-	P	
7440-09-7	Potassium	862	B	-	P
7782-49-2	Selenium	1.9	-	P	
7440-22-4	Silver	0.23	U	-	P
7440-23-5	Sodium	143	B	-	P
7440-28-0	Thallium	1.2	B	-	P
7440-62-2	Vanadium	15.9	-	P	
7440-66-6	Zinc	411	-	P	
	Cyanide	0.57	U	-	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP50

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213010

Level (low/med): LOW Date Received: 05/05/95

% Solids: 78.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7640	-	-	P
7440-36-0	Antimony	0.76	U	N	P
7440-38-2	Arsenic	10.8	-	-	P
7440-39-3	Barium	95.9	-	-	P
7440-41-7	Beryllium	0.59	B	-	P
7440-43-9	Cadmium	1.4	-	-	P
7440-70-2	Calcium	14400	-	-	P
7440-47-3	Chromium	139	-	-	P
7440-48-4	Cobalt	8.7	B	-	P
7440-50-8	Copper	45.0	-	-	P
7439-89-6	Iron	18400	-	-	P
7439-92-1	Lead	201	-	-	P
7439-95-4	Magnesium	6830	-	-	P
7439-96-5	Manganese	540	-	*	P
7439-97-6	Mercury	0.13	U	-	CV
7440-02-0	Nickel	21.4	-	-	P
7440-09-7	Potassium	1430	-	-	P
7782-40-2	Selenium	2.0	-	-	P
7440-22-4	Silver	0.36	B	-	P
7440-23-5	Sodium	108	B	-	P
7440-28-0	Thallium	1.3	U	-	P
7440-62-2	Vanadium	23.4	-	-	P
7440-66-6	Zinc	318	-	-	P
	Cyanide	1.9	-	-	CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

MEZP51

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213011

Level (low/med): LOW Date Received: 05/05/95

% Solids: 75.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9730	-		P
7440-36-0	Antimony	0.80	U	N	P
7440-38-2	Arsenic	11.6	-		P
7440-39-3	Barium	117	-		P
7440-41-7	Beryllium	0.84	B		P
7440-43-9	Cadmium	1.9	-		P
7440-70-2	Calcium	15500	-		P
7440-47-3	Chromium	19.4	-		P
7440-48-4	Cobalt	11.3	B		P
7440-50-8	Copper	132	-		P
7439-89-6	Iron	21300	-		P
7439-92-1	Lead	614	-		P
7439-95-4	Magnesium	9550	-		P
7439-96-5	Manganese	726	*		P
7439-97-6	Mercury	0.18	-		CV
7440-02-0	Nickel	23.2	-		P
7440-09-7	Potassium	1280	B		P
7782-19-2	Selenium	2.9	-		P
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	82.9	B		P
7440-28-0	Thallium	1.9	B		P
7440-62-2	Vanadium	27.4	-		P
7440-66-6	Zinc	862	-		P
	Cyanide	0.66	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

INORGANIC ANALYSES DATA SHEET

1

MEZP52

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213012

Level (low/med): LOW Date Received: 05/05/95

% Solids: 75.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	7910		P	
7440-36-0	Antimony	0.80	U	N	P
7440-38-2	Arsenic	12.7		P	
7440-39-3	Barium	144		P	
7440-41-7	Beryllium	0.74	B		P
7440-43-9	Cadmium	1.5		P	
7440-70-2	Calcium	19700		P	
7440-47-3	Chromium	19.7		P	
7440-48-4	Cobalt	9.7	B		P
7440-50-8	Copper	57.0		P	
7439-89-6	Iron	22800		P	
7439-92-1	Lead	262		P	
7439-95-4	Magnesium	10100		P	
7439-96-5	Manganese	805		*	P
7439-97-6	Mercury	0.64		CV	
7440-02-0	Nickel	24.3		P	
7440-09-7	Potassium	1180	B		P
7782-19-2	Selenium	2.4		P	
7440-22-4	Silver	0.27	U		P
7440-23-5	Sodium	116	B		P
7440-28-0	Thallium	1.3	U		P
7440-62-2	Vanadium	24.5		P	
7440-66-6	Zinc	392		P	
	Cyanide	1.1		CA	

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP72

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213013

Level (low/med): LOW Date Received: 05/05/95

% Solids: 72.7

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	11100	-	P	
7440-36-0	Antimony	0.83	U	N	P
7440-38-2	Arsenic	12.8	-	P	
7440-39-3	Barium	122	-	P	
7440-41-7	Beryllium	1.1	B	P	
7440-43-9	Cadmium	0.28	U	P	
7440-70-2	Calcium	17200	-	P	
7440-47-3	Chromium	21.0	-	P	
7440-48-4	Cobalt	11.3	B	P	
7440-50-8	Copper	63.6	-	P	
7439-89-6	Iron	25500	-	P	
7439-92-1	Lead	244	-	P	
7439-95-4	Magnesium	9510	-	P	
7439-96-5	Manganese	772	*	P	
7439-97-6	Mercury	0.14	U	CV	
7440-02-0	Nickel	30.5	-	P	
7440-09-7	Potassium	1930	-	P	
7782-49-2	Selenium	2.2	-	P	
7440-22-4	Silver	0.28	U	P	
7440-23-5	Sodium	185	B	P	
7440-28-0	Thallium	1.4	U	P	
7440-62-2	Vanadium	29.5	-	P	
7440-66-6	Zinc	330	-	P	
	Cyanide	0.69	U	CA	

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP73

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213014

Level (low/med): LOW Date Received: 05/05/95

% Solids: 79.9

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9340	-		P
7440-36-0	Antimony	0.75	U	N	P
7440-38-2	Arsenic	8.0	-		P
7440-39-3	Barium	94.1	-		P
7440-41-7	Beryllium	0.66	B		P
7440-43-9	Cadmium	0.25	U		P
7440-70-2	Calcium	16000	-		P
7440-47-3	Chromium	19.0	-		P
7440-48-4	Cobalt	10.5	B		P
7440-50-8	Copper	29.4	-		P
7439-89-6	Iron	21200	-		P
7439-92-1	Lead	116	-		P
7439-95-4	Magnesium	9320	-		P
7439-96-5	Manganese	744	*		P
7439-97-6	Mercury	0.13	U		CV
7440-02-0	Nickel	20.7	-		P
7440-09-7	Potassium	1810	-		P
7702-10-2	Selenium	2.8	-		P
7440-22-4	Silver	0.25	U		P
7440-23-5	Sodium	117	B		P
7440-28-0	Thallium	1.3	B		P
7440-62-2	Vanadium	25.6	-		P
7440-66-6	Zinc	205	-		P
	Cyanide	0.63	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP74

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213015

Level (low/med): LOW Date Received: 05/05/95

% Solids: 70.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	9940	-		P
7440-36-0	Antimony	0.85	U	N	P
7440-38-2	Arsenic	9.6	-		P
7440-39-3	Barium	141	-		P
7440-41-7	Beryllium	0.91	B		P
7440-43-9	Cadmium	0.28	U		P
7440-70-2	Calcium	6170	-		P
7440-47-3	Chromium	19.1	-		P
7440-48-4	Cobalt	12.5	B		P
7440-50-8	Copper	32.7	-		P
7439-89-6	Iron	23800	-		P
7439-92-1	Lead	145	-		P
7439-95-4	Magnesium	3780	-		P
7439-96-5	Manganese	1160	-	*	P
7439-97-6	Mercury	0.14	U		CV
7440-02-0	Nickel	24.2	-		P
7440-09-7	Potassium	1780	-		P
7782-49-2	Selenium	3.0	-		P
7440-22-4	Silver	0.28	U		P
7440-23-5	Sodium	153	B		P
7440-28-0	Thallium	1.4	U		P
7440-62-2	Vanadium	28.4	-		P
7440-66-6	Zinc	151	-		P
	Cyanide	0.71	U		CA

Color Before: BLACK Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

1

EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

MEZP75

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213016

Level (low/med): LOW Date Received: 05/05/95

% Solids: 85.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1550	-		P
7440-36-0	Antimony	0.70	U	N	P
7440-38-2	Arsenic	5.7			P
7440-39-3	Barium	8.9	B		P
7440-41-7	Beryllium	0.29	B		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	62100			P
7440-47-3	Chromium	5.1			P
7440-48-4	Cobalt	4.0	B		P
7440-50-8	Copper	49.8			P
7439-89-6	Iron	14600			P
7439-92-1	Lead	13.5			P
7439-95-4	Magnesium	32700			P
7439-96-5	Manganese	757		*	P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	10.5			P
7440-09-7	Potassium	232	B		P
7782-40-7	Selenium	1.3			P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	207	B		P
7440-28-0	Thallium	1.4	B		P
7440-62-2	Vanadium	11.6	B		P
7440-66-6	Zinc	169			P
	Cyanide	0.58	U		CA

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP76

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213017

Level (low/med): LOW Date Received: 05/05/95

% Solids: 86.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1140	-		P
7440-36-0	Antimony	0.70	U	N	P
7440-38-2	Arsenic	5.0			P
7440-39-3	Barium	6.6	B		P
7440-41-7	Beryllium	0.23	U		P
7440-43-9	Cadmium	0.23	U		P
7440-70-2	Calcium	93900	-		P
7440-47-3	Chromium	4.4			P
7440-48-4	Cobalt	2.9	B		P
7440-50-8	Copper	18.9			P
7439-89-6	Iron	8420	-		P
7439-92-1	Lead	114			P
7439-95-4	Magnesium	49400	-		P
7439-96-5	Manganese	799	-	*	P
7439-97-6	Mercury	0.12	U		CV
7440-02-0	Nickel	6.2	B		P
7440-09-7	Potassium	186	B		P
7782-49-2	Selenium	1.1	R		P
7440-22-4	Silver	0.23	U		P
7440-23-5	Sodium	240	B		P
7440-28-0	Thallium	1.2	U		P
7440-62-2	Vanadium	7.2	B		P
7440-66-6	Zinc	132	-		P
	Cyanide	0.58	U		CA

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MEZP77

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

Matrix (soil/water): SOIL Lab Sample ID: 2213018

Level (low/med): LOW Date Received: 05/05/95

% Solids: 86.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1310	-	P	
7440-36-0	Antimony	182	-	N	P
7440-38-2	Arsenic	8.3		P	
7440-39-3	Barium	25.3	B	P	
7440-41-7	Beryllium	0.23	U	P	
7440-43-9	Cadmium	0.23	U	P	
7440-70-2	Calcium	58000		P	
7440-47-3	Chromium	13.3		P	
7440-48-4	Cobalt	4.8	B	P	
7440-50-8	Copper	196		P	
7439-89-6	Iron	48200		P	
7439-92-1	Lead	12600		P	
7439-95-4	Magnesium	31100		P	
7439-96-5	Manganese	978	*	P	
7439-97-6	Mercury	0.12	U	CV	
7440-02-0	Nickel	16.8		P	
7440-09-7	Potassium	157	B	P	
7782-49-2	Selenium	2.5		P	
7440-22-4	Silver	0.28	B	P	
7440-23-5	Sodium	153	B	P	
7440-28-0	Thallium	2.2	B	P	
7440-62-2	Vanadium	11.0	B	P	
7440-66-6	Zinc	1240		P	
	Cyanide	0.58	U	CA	

Color Before: BROWN Clarity Before: Texture: COARSE

Color After: YELLOW Clarity After: Artifacts:

Comments:

3
BLANKS

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK

Case No.: 23525

SAS No.: _____

SDG No.: MEZP23

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum	7.0	U	7.0	U	7.0	U	7.0	U	1.400	U	P
Antimony	3.0	U	3.0	U	3.0	U	3.0	U	0.600	U	P
Arsenic	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Barium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Beryllium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cadmium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Calcium	8.0	U	8.0	U	8.0	U	8.0	U	1.600	U	P
Chromium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Cobalt	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Copper	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Iron	56.8	B	12.0	U	12.0	U	12.0	U	2.400	U	P
Lead	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Magnesium	10.0	U	10.0	U	10.0	U	10.0	U	2.000	U	P
Manganese	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Mercury	0.2	U	0.2	U	0.2	U	0.2	U	0.100	U	CV
Nickel	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Potassium	23.0	U	23.0	U	23.0	U	23.0	U	4.600	U	P
Selenium	4.0	U	4.0	U	4.0	U	4.0	U	0.800	U	P
Silver	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Sodium	6.0	U	6.0	U	6.0	U	6.0	U	1.200	U	P
Thallium	5.0	U	5.0	U	5.0	U	5.0	U	1.000	U	P
Vanadium	1.0	U	1.0	U	1.0	U	1.0	U	0.200	U	P
Zinc	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Cyanide	10.0	U	10.0	U	10.0	U	10.0	U	0.500	U	CA

3
BLANKS

Lab Name: SOUTHWEST_LAB_OF_OK_____

Contract: 68-D3-0040

Lab Code: SWOK_____

Case No.: 23525_____

SAS No.: _____

SDG No.: MEZP23

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration						Prepa- ration Blank	C	M
			1	C	2	C	3	C			
Aluminum			7.0	U							P
Antimony			3.0	U							P
Arsenic			5.0	U							P
Barium			1.0	U							P
Beryllium			1.0	U							P
Cadmium			1.0	U							P
Calcium			8.0	U							P
Chromium			1.0	U							P
Cobalt			1.0	U							P
Copper			2.0	U							P
Iron			12.0	U							P
Lead			2.0	U							P
Magnesium			10.0	U							P
Manganese			1.0	U							P
Mercury			0.2	U							CV
Nickel			1.0	U							P
Potassium			23.0	U							P
Selenium			4.6	B							P
Silver			1.0	U							P
Sodium			6.0	U							P
Thallium			5.0	U							P
Vanadium			1.0	U							P
Zinc			2.0	U							P
Cyanide			10.0	U							CA

3
BLANKS

Lab Name: SOUTHWEST LAB OF OK _____

Contract: 68-D3-0040

Lab Code: SWOK _____

Case No.: 23525 _____

SAS No.: _____

SDG No.: MEZP23

Preparation Blank Matrix (soil/water): _____

Preparation Blank Concentration Units (ug/L or mg/kg): _____

Analyte	Initial Calib. Blank (ug/L)		Continuing Calibration Blank (ug/L)						Prepa- ration Blank		M
	C	C	1	C	2	C	3	C	C	C	
Aluminum											NR
Antimony	3.0	U	3.0	U	3.0	U	3.0	U			P
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead	2.0	U	2.0	U	2.0	U	2.0	U			P
Magnesium											NR
Manganese	1.0	U	1.0	U	1.0	U	1.0	U			P
Mercury											NR
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Cyanide											NR

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEZP74S

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK

Case No.: 23525

SAS No.: _____

SDG No.: MEZP23

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 70.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony	75-125	98.3133		0.8475	U	141.24	69.6	N	P
Arsenic	75-125	613.2669		9.5596		564.97	106.9		P
Barium	75-125	769.9316		140.5743		564.97	111.4		P
Beryllium	75-125	16.2678		0.9051	B	14.12	108.8		P
Cadmium	75-125	14.8446		0.2825	U	14.12	105.1		P
Calcium									NR
Chromium	75-125	82.7983		19.0924		56.50	112.8		P
Cobalt	75-125	161.4119		12.4517	B	141.24	105.5		P
Copper	75-125	116.0147		32.7452		70.62	117.9		P
Iron									NR
Lead	75-125	292.0444		144.9556		141.24	104.1		P
Magnesium									NR
Manganese		1094.3362		1162.0737		141.24	-48.0		P
Mercury	75-125	0.8616		0.1412	U	0.71	121.4		CV
Nickel	75-125	173.8291		24.1602		141.24	106.0		P
Potassium									NR
Gold	75-125	602.3071		2.9729		564.97	106.1		P
Silver	75-125	14.7619		0.2825	U	14.12	104.5		P
Sodium									NR
Thallium	75-125	577.0794		1.4124	U	564.97	102.1		P
Vanadium	75-125	179.9127		28.3732		141.24	107.3		P
Zinc	75-125	306.1641		151.0105		141.24	109.9		P
Cyanide	75-125	7.2914		0.7062	U	7.06	103.3		CA

Comments:

5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

MEZP74A

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK

Case No.: 23525

SAS No.: SDG No.: MEZP23

Matrix (soil/water) : SOIL

Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Added (SA)	%R	Q	M
Aluminum									NR
Antimony		119.18		3.00	U	120.0	99.3	P	NR
Arsenic									NR
Barium									NR
Beryllium									NR
Cadmium									NR
Calcium									NR
Chromium									NR
Cobalt									NR
Copper									NR
Iron									NR
Lead									NR
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel									NR
Potassium									NR
Selenium									NR
Silicon									NR
Sodium									NR
Thallium									NR
Vanadium									NR
Zinc									NR
Cyanide									NR

Comments:

6
DUPLICATES

EPA SAMPLE NO.

MEZP74D

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK

Case No.: 23525

SAS No.: _____

SDG No.: MEZP23

Matrix (soil/water): SOIL

Level (low/med): LOW

% Solids for Sample: 70.8

% Solids for Duplicate: 71.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		9940.7186	U	10777.0017	U	8.1	P	
Antimony		0.8475	U	0.8475	U		P	
Arsenic	2.8	9.5596		9.8155		2.6	P	
Barium	56.5	140.5743		122.5678		13.7	P	
Beryllium		0.9051	B	0.9458	B	4.4	P	
Cadmium		0.2825	U	0.2825	U		P	
Calcium	1412.4	6171.1285		5995.8675		2.9	P	
Chromium		19.0924		20.0503		4.9	P	
Cobalt		12.4517	B	11.4164	B	8.7	P	
Copper	7.1	32.7452		31.1983		4.8	P	
Iron		23773.6737		24526.0969		3.1	P	
Lead		144.9556		146.2686		0.9	P	
Magnesium	1412.4	3775.7712		3753.7497		0.6	P	
Manganese		1162.0737		908.6243		24.5	*	P
Mercury		0.1412	U	0.1412	U		CV	
Nickel	11.3	24.1602		22.9398		5.2	P	
Potassium	1412.4	1777.7460		1879.4322		5.6	P	
Selenium	1.4	2.9729		1.7034		54.3	P	
Silver		0.2825	U	0.2825	U		P	
Sodium		153.2322	B	165.8845	B	7.9	P	
Thallium		1.4124	U	1.4124	U		P	
Vanadium	14.1	28.3732		29.8918		5.2	P	
Zinc		151.0105		147.4339		2.4	P	
Cyanide		0.7062	U	0.7062	U		CA	

10

Instrument Detection Limits (Quarterly)

Lab Name: SOUTHWEST LAB OF OK Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525 SAS No.: SDG No.: MEZP23

ICP ID Number: TJA#2 Date: 04/04/95

Flame AA ID Number :

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	7.0	P
Antimony	206.83		60	3.0	P
Arsenic	189.04		10	5.0	P
Barium	493.41		200	1.0	P
Beryllium	313.04		5	1.0	P
Cadmium	226.50		5	1.0	P
Calcium	317.93		5000	8.0	P
Chromium	267.72		10	1.0	P
Cobalt	228.61		50	1.0	P
Copper	324.75		25	2.0	P
Iron	271.44		100	12.0	P
Lead	220.35		3	2.0	P
Magnesium	279.08		5000	10.0	P
Manganese	257.61		15	1.0	P
Mercury			0.2		NR
Nickel	231.60		40	1.0	P
Potassium	766.49		5000	23.0	P
Selenium	196.02		5	4.0	P
Silver	328.07		10	1.0	P
Sodium	588.99		5000	6.0	P
Thallium	190.68		10	5.0	P
Vanadium	292.40		50	1.0	P
Zinc	213.86		20	2.0	P

Comments:

10
Instrument Detection Limits (Quarterly)

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK

Case No.: 23525

SAS No.: _____

SDG No.: MEZP23

ICP ID Number: _____

Date: 04/14/95

Flame AA ID Number : PS200B

Furnace AA ID Number :

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		NR
Antimony			60		NR
Arsenic			10		NR
Barium			200		NR
Beryllium			5		NR
Cadmium			5		NR
Calcium			5000		NR
Chromium			10		NR
Cobalt			50		NR
Copper			25		NR
Iron			100		NR
Lead			3		NR
Magnesium			5000		NR
Manganese			15		NR
Mercury	253.30		0.2	0.2	CV
Nickel			40		NR
Potassium			5000		NR
Selenium			5		NR
Silver			10		NR
Sodium			5000		NR
Thallium			10		NR
Vanadium			50		NR
Zinc			20		NR

Comments:

14
ANALYSIS RUN LOG

046

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: SDG No.: MEZP23

Instrument ID Number: TJA#2

Method: P

Start Date: 05/09/95

End Date: 05/09/95

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	F U	P E	M B	M G	H N	N G	K I	S E	A G	N A	T G	V L	Z N	O N	
SO	1.00	0345		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
S	1.00	0350		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICV	1.00	0355		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICB	1.00	0400		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSA	1.00	0405		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ICSAB	1.00	0410		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CRI	1.00	0417			X	X		X	X		X	X		X	X		X		X		X		X		X		X
CCV	1.00	0423		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB	1.00	0428		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
PBS	1.00	0433		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CSS	1.00	0438		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LCSS	5.00	0443																									
MEZP23	1.00	0448		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP24	1.00	0453		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP25	1.00	0458		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP26	1.00	0503		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP27	1.00	0508		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP28	1.00	0514		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZ	1.00	0519																									
CCV	1.00	0524		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB	1.00	0529		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP29	1.00	0534		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP30	1.00	0539		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP31	1.00	0544		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP50	1.00	0549		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP51	1.00	0555		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP52	1.00	0600		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP72	1.00	0605		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MEZP73	1.00	0610		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
ZZZZZ	1.00	0615																									
CCV	1.00	0620		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CCB	1.00	0625		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

U.S. EPA - CLP

14
ANALYSIS RUN LOG

047

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: SDG No.:MEZP23

Instrument ID Number: TJA#2

Method: P

Start Date: 05/09/95

End Date: 05/09/95

14
ANALYSIS RUN LOG

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: _____ SDG No.:MEZP23

Instrument ID Number: TJA#2

Method: P

Start Date: 05/09/95

End Date: 05/10/95

14
ANALYSIS RUN LOG

Lab Name: SOUTHWEST LAB OF OK _____

Contract: 68-D3-0040

Lab Code: SWOK _____ Case No.: 23525 _____

SAS No.: _____ SDG No.: MEZP23

Instrument ID Number: PS200B _____

Method: CV

Start Date: 05/09/95

End Date: 05/09/95

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K G	S E	A G	N A	T L	V N	C N
SO	1.00	0935		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
S0.2	1.00	0937		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
S1	1.00	0939		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
S5	1.00	0942		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
S10	1.00	0944		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
ICV	1.00	0947		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
ICB	1.00	0949		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
CRA	1.00	0952		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
CCV	1.00	0954		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
CB	1.00	0956		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
BS	1.00	1001		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
LCSS	10.00	1004		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP23	1.00	1006		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP24	1.00	1008		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP25	1.00	1010		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP26	1.00	1013		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP27	1.00	1015		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP28	1.00	1017		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP29	1.00	1020		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP30	1.00	1022		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
CCV	1.00	1024		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
CCB	1.00	1027		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP31	1.00	1029		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP50	1.00	1031		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP51	1.00	1033		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP52	1.00	1036		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP72	1.00	1038		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP73	1.00	1040		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP74	1.00	1042		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP74D	1.00	1045		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP74S	1.00	1047		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-
MEZP75	1.00	1049		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	X	-	-	-	-	-	-	-

U.S. EPA - CLP

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050

ANALYSIS RUN LOG

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: SDG No.:MEZP23

Instrument ID Number: PS200B

Method: CV

Start Date: 05/09/95

End Date: 05/09/95

ANALYSIS RUN LOG

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: SDG No.: MEZP23

Instrument ID Number: LACHAT

Method: CA

Start Date: 05/09/95

End Date: 05/09/95

EPA Sample No.	D/F	Time	% R	Analytes																						
				A L	S B	A S	B A	B E	C D	C A	C R	C O	F U	P E	M B	M G	H N	N G	K I	S B	A G	N A	T L	V E	Z N	
S200	1.00	1536		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S100	1.00	1537		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S50	1.00	1538		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
S10	1.00	1539		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
SO	1.00	1540		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICV	1.00	1640		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ICB	1.00	1641		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1642		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1643		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PBS	1.00	1643		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CSS	1.00	1644		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP23	1.00	1645		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP24	1.00	1645		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP25	1.00	1646		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP26	1.00	1647		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1648		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1648		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP27	1.00	1650		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP28	1.00	1651		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP29	1.00	1652		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP30	1.00	1653		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP31	1.00	1653		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP50	1.00	1654		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP51	1.00	1655		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP52	1.00	1656		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP72	1.00	1656		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP73	1.00	1657		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCV	1.00	1658		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CCB	1.00	1658		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP74	1.00	1701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP74D	1.00	1701		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MEZP74S	1.00	1702		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

U.S. EPA - CLP

052

ANALYSIS RUN LOG

Lab Name: SOUTHWEST LAB OF OK

Contract: 68-D3-0040

Lab Code: SWOK Case No.: 23525

SAS No.: _____ SDG No.:MEZP23

Instrument ID Number: LACHAT

Method: CA

Start Date: 05/09/95

End Date: 05/09/95



United States Environmental Protection Agency
Contract Laboratory Program

"Organic Traffic Report & Chain of Custody Record

(For Inorganic CLP Analysis)

SAS No. (if applicable)	Case No.
5-5-95	25225

1. Matrix {Enter in Column A)}	2. Preservative {Enter in Column D)}	2. Region No. Sampling Co.	4. Date Shipped	Carrier	6. Date Received -- Received by:						
1. Surface Water	1. HCl	5/4/95	FEDERAL EXPRESS	Mr. Robert Wilson	5-5-95						
2. Ground Water	2. HNO3										
3. Leachate	3. NaOH										
4. Field QC	4. H2SO4										
5. Soil/Sediment	5. K2Cr2O7										
6. Oil (High only)	6. Iodine only										
7. Waste (High only)	7. Other (specify in Column D)										
8. Other (specify in Column A)	N. Not preserved										
CLP Sample Numbers (from labels)	A Matrix (from Box 1) Other:	B Conc.: Low Med High	C Sample Type/ Comp./ Grab Other:	D Preser- vative Metals	E - RAS Analysis Low only High only	F Regional Specific Tracking Number or Tag Numbers	G Station Location Identifier	H Mo/Day/ Year/Time Sample Collection	I Corresponding CLP Organic Sample No.	J Sampler Initials	K High Phases
MEZ-P-23	5	L	G	6	X	5-113003	X111	5/4/95 1320	CLPE 4	Kue	5-4-45
MEZ-P-24	5	L	G	6	X	5-113003	X111	5/4/95 1320	CLPE 5	Kue	5-4-45
MEZ-P-25	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 6	Kue	5-4-45
MEZ-P-26	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 7	Kue	5-4-45
MEZ-P-27	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 8	Kue	5-4-45
MEZ-P-28	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 9	Kue	5-4-45
MEZ-P-29	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 10	Kue	5-4-45
MEZ-P-30	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 11	Kue	5-4-45
MEZ-P-31	5	L	G	6	X	5-113003	X111	5/4/95 1440	CLPE 12	Kue	5-4-45
Shipment for Case Complete? (Y/N)	Page of	Sample(s) to be Used for Laboratory QC			Additional Sampler Signatures			Chain of Custody Seal Number(s)			
		11/2/95 1440			11/2/95 1440			11/2/95 1440			

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)

DISTRIBUTOR

Green - Region Copy
White - Lab Copy for Return to Region

Pink - 3MO Copy
Yellow - Lab Copy for Return to Site

EPA Form 910-1

*SEE REVERSE FOR ADDITIONAL STANDARD INSTRUCTIONS
**SEE REVERSE FOR PURPOSE CODE DEFINITION



United States Environmental Protection Agency Contract Laboratory Program

Organic Traffic Report & Chain of Custody Record

EPA United States Environmental Protection Agency		Organic Traffic Report & Chain of Custody Record (For Inorganic CLP Analysis)			SAS No. (if applicable)	Case No. <i>2225</i>
1. Matrix (Enter in Column A)	2. Preservative (Enter in Column D)	3. Sampler Signature	4. Date Shipped Carrier	5. Ship To <i>300 W 1st Street, Suite C Brooklyn, NY 11201-2</i>	6. Date Received -- Received by: <i>55-95</i>	
1. Surface Water	1. HCl		Altitude Number	Laboratory Contract Number	Unit Price	
2. Ground Water	2. HNO ₃			<i>68-D3-0040</i>	<i>\$226.00</i>	
3. Leachate	3. NaOH					
4. Field OC	4. H ₂ SO ₄					
5. Soil/Sediment	5. K ₂ Cr ₂ O ₇					
6. Oil (High only)	6. Ice only					
7. Waste (High only)	7. Other (specify in Column D)					
8. Other (specify in Column A)	N. Not preserved	Lead <input type="checkbox"/> SF <input type="checkbox"/> PRP <input type="checkbox"/> ST <input type="checkbox"/> FED <input type="checkbox"/>	Early Action <input type="checkbox"/> CLEM <input type="checkbox"/> Long-Term Action <input type="checkbox"/> FS <input type="checkbox"/> RD <input type="checkbox"/> RA <input type="checkbox"/> O&M <input type="checkbox"/> NPLD <input type="checkbox"/>	Received by <i>ATTN: Director, Office of Solid Waste</i>	Contract Number	Price

CHAIN OF CUSTODY RECORD

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
<u>B. L. C.</u>	5/15/00				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks	Is custody seal intact None
		<u>B. L. C.</u>	5/15/00	0915	All samples intact

QC EXCEPTION SUMMARY REPORT

Page ____ of ____

CASE\SAS #: 23525

SITE: U.S. Steel Wantagan

MATRIX: Snd

WATER SAMPLE SPK: _____

DATA SET: ME2P23

LAB: SWPK

CONC: Low

WATER SAMPLE DUP: _____

LAB QC #: _____

REVIEWED BY: J. Kelle

SOIL SAMPLE SPK: ME2P74

SOIL SAMPLE DUP: ME2P74

DATE: 5/17/95

ME2P23-31, 50-52, 72-77

FORM #	SH	FORM 2	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FORM 1	FIELD	FIELD	FIELD	FIELD
ELEMENT	BOLD TIME	INITIAL CALIB	CONTI N CALIB	CALIB BLANK	PREP WATER	PREP SOIL	KCL 4%	POLL. 4%	POLL. 4%	LGS Aq	LGS SOIL	SERIAL DILUTION	SERIAL DILUTION	AQ DIL. 4%	AQ DIL. 4%	BLANK	DUP 4%	BLANK	DUP 4%	BLANK	DUP 4%	GRAA AMATT 4%	
ALUMINUM	Off	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	Sh	
ANTIMONY																							
ARSENIC																							
BARIUM																							
BERYLLIUM																							
CADMIUM																							
CALCIUM																							
CHROMIUM																							
COBALT																							
IRON																							
LEAD																							
COPPER																							
MANGANESE																							
MERCURY																							
MAGNESIUM																							
NICKEL																							
POTASSIUM																							
SELENIUM																							
SILVER																							
ZODIAC																							
TRIALLIUM																							
TIN																							
VANADIUM																							
ZINC																							
CTANDS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

CCB

< - 146 / 1 All current ME2P24